# SKYLINE () Oil Company

A TEXAS EASTERN COMPANY

RECEIVED

OCT 09 1984

DIVISION OF OIL GAS & MINING

October 4, 1984

State of Utah Division Oil, Gas & Mining 4241 State Office Building Salt Lake City, UT 84114

Re: Application for Permit to Drill

Mustang Unit #27-43 San Juan County, Utah

Gentlemen:

Attached please find the above referenced APD submitted in triplicate for your approval.

In addition, an application for temporary water rights has been submitted to the State Engineer for approval. Upon receiving approval, a copy will be submitted for your records.

If you have any questions concerning this APD, please contact the undersigned at (303) 860-9031.

Sincerely,

Michael D. Anderson

Staff Engineer

MDA:bjs

Att.

Form 3160-3 (November 1983) (formerly 9-331C)

# BUBMIT IN TRACATE

(Other instructions on reverse side)

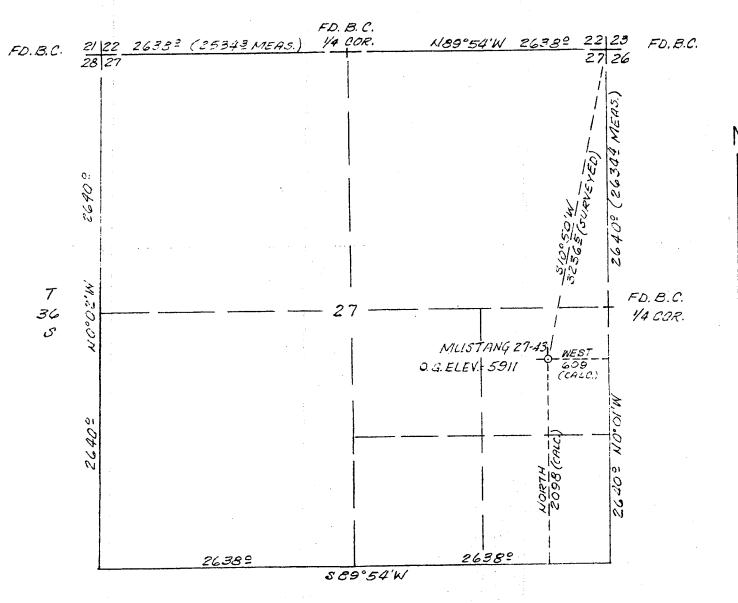
Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

#### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

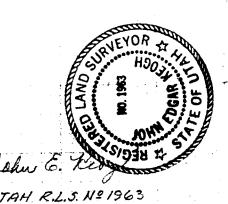
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5. LEASE DESIGNATION AND SERIAL NO. U-46818

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b. TYPE OF WELL			BIN	ore 🛅	MULTIPL		Mustang 6. FARM OF LEASE NA	<b>H</b> D
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Skyline	Oil Company							
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	BY:	l K	Du			-		•
IN ABOVE SPACE DESCRIE	T PROPOSED PROGRAM :	If proposal is to de	epen(or 1	plug back, give	data on p	resent pro	ductive sone and propo	sed new productive
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RIGNED MUS	hail D. C	Indews.	IITLE	Staff E	ngine	r	DATE <u>OC</u>	T. 4, 1984
(This space for Fed	deral or State office us	e)					-	
<b>*****</b>				APPROVAL DAT	· E			
PERMIT NO.						-		
APPROVED BY			ritle		· · · · · · · · · · · · · · · · · · ·		DATE	
CONDITIONS OF APPR	OVAL, IF ANY:	* :						



NOTE: BOUNDARY CALLS ARE FROM G.L.O. TWP. MAP



WELL LOCATION PLAT OF

MUSTANG 27-43 IN

NE'4-SE'4,SEC.27,T36S,R23E,S.L.B.\$M.

SAN JUAN COUNTY, UTAH

TRANSIT \$ E.D.M. SURVEY

FOR: TEXAS EASTERN OIL CO.

SCALE: |'=1000' SEPT.13,1984

BEARING FROM E.LINE, N.E. 14, SEC. 27(NOOIW

ELEV BY VER ANGLES FROM U.S.G.S. TOPO.QUAD. "BLANDING, UTAH", 1957 (EAST 14 COR., SEC. 27 : 6000) Skyline Oil Company Well No. Mustang Unit 27-43 Sec. 27, T. 36 S., R. 23 E. San Juan County, Utah Lease U-46818

#### Supplemental Stipulations:

1. A qualified archaeologist will monitor the construction of the access road and well location.

 Your contact with the District Office is: Robert (Bob) Graff, Petroleum Engineer

Address: 82 East Dogwood, P.O. Box 970

Moab, Utah 84532

Office Phone: 801-259-6111 Ext. 216

Home Phone: 801-259-6088

Resource Area Manager's address and contacts are: San Juan Resource Area

Address: 480 South First West, P.O. Box 7

Monticello, Utah 84535

Your contact is: Rich McClure Office Phone: 801-587-2201 Home Phone: 801-587-2874

OPERATOR Skyline Oil Go. DATE 10-12-84
WELL NAME Mustang Unit # 2243
WELL NAME Mustang Unit # 2243  SEC NESE 27 T 365 R 23E COUNTY San Juan
43-037-31104  API NUMBER  TYPE OF LEASE
POSTING CHECK OFF:
INDEX
NID PI
MAP
PROCESSING COMMENTS:  Wital approval - BLM on P.O.D
ned water permit
Vertal approval 11/14/84 Jan Baya /3
APPROVAL LETTER:
SPACING: A-3 Musting C-3-a CAUSE NO. & DATE
c-3-b
SPECIAL LANGUAGE:

	RECONCILE WELL NAME AND LOCATION ON APD AGAINST SAME DATA ON PLAT MAP.
	AUTHENTICATE LEASE AND OPERATOR INFORMATION
	VERIFY ADEQUATE AND PROPER BONDING
	AUTHENTICATE IF SITE IS IN A NAMED FIELD, ETC.
	APPLY SPACING CONSIDERATION
·4,	ORDER
en e	UNIT Muchany
	c-3-b
:	c-3-c
	CHECK DISTANCE TO NEAREST WELL.
	CHECK OUTSTANDING OR OVERDUE REPORTS FOR OPERATOR'S OTHER WELLS.
	IF POTASH DESIGNATED AREA, SPECIAL LANGUAGE ON APPROVAL LETTER
	IF IN OIL SHALE DESIGNATED AREA, SPECIAL APPROVAL LANGUAGE.
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# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Form 3160-6 (November 1983) (Formerly 9-329)

MONTHLY REPORT
OF
OPERATIONS

	d — Budget Bureau No. 1004—013					
Lease No	U-46818					
Communitiza	tion Agreement No					
Field Name _	Mustang Flat					
	Mustang					
<b>Participating</b>	Area					
County	San Juan	_StateUtah				
Operator	TEXAS EASTERN SKYLINE	OIL COMPANY				
☐ Amended	Report					

The following is a correct report of operations and production (including status of all unplugged wells) for the mont of November 19 84

#### (See Reverse of Form for Instructions)

This report is required by law (30 U.S.C. 189, 30 U.S.C. 359, 25 U.S.C. 396d), regulation (43 CFR 3162.4-3), and the terms of the lease. Failure to report can result in the assessment of liquidated damages, (43 CFR 3160), penalties, shutting down operations, or basis for recommendation to cancel the lease and forfeit the bond (43 CFR 3160).

Well No.	Sec. &	TWP	RNG	Well Status	Days Prod.	*Barrels of Oil	*MCF of Gas	"Barrels of Water	Remarks
7-43	NE SE Sec. 27	36S	23E	DRG					Spudded 11-21-8 Drilled 124" ho to 2056' Set 9 5/8" casi Drilling 8 3/4" hole @5970'
							7		

\*If none, so state.

### DISPOSITION OF PRODUCTION (Lease, Participating Area, or Communitized Area basis)

	Oil & Condensate	Gas	Water
	(BBLS)	(MCF)	(BBLS)
On hand, Start of Month		xxxxxxxxxxxxxx	xxxxxxxxxxxxxxx
Produced		**************************************	
Sold			XXXXXXXXXXXXXXXX
Spilled or Lost	#	xxxxxxxxxxxxxx	XXXXXXXXXXXXXXXX
Flared or Vented	XXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXX
'Used on Lease			XXXXXXXXXXXXXXXX
Injected			
Surface Pits	XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXX	
Other (Identify)			
On hand, End of Month		XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXX
API Gravity/BTU Content	)		XXXXXXXXXXXXXXXX
Authorized Signature: Mullac J. Con.	Address:_	1775 Sherman, Suite	1200, Denver, CO 80

Form\_3160-3'
(November 1983)
(formerly 9-331C)

12½''

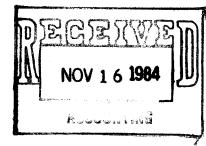
# UNITED STATES SUBMIT IN TRIL\_ATI (Other Instructions on reverse side)

REC'D MDO OCT 9 1984

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

		5. LEASE DESIGNATION A	ND BERIAL NO.				
		U-46818					
APPLICATION	ACK	6. IF INDIAN, ALLOTTEE	DE TRIBE NAME				
la. TYPE OF WORK DRII	LL X	DEEPEN 🗌	i	PLUG BAC	K 🗆	7. UNIT AGREEMENT NAI	M.B.
b. TIPE OF WELL	s —		BINGLE Z	MULTIP EONE	LIE [	Mustang 6. FARM OR LEASE WANT	
OIL GA WELL WI 2. NAME OF OPERATOR	CLL OTHER		ZONE A	2012		Mustang I	nit
Skyline	Oil Company					9. WELL NO.	
8. ADDRESS OF OPERATOR			•			27-43 10. FIELD AND POOL, OR	
1775 She	erman St., Su	ite 1200, I	Denver, (	co 8020	)3	10. FIELD AND POOL, OR	WILDCAT
4. LOCATION OF WELL (Re	port location clearly and	in accordance with	any State requir	ements.*)		Mustang Flat	
At surface		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA					
2098 FS At proposed prod. sone	₹.23E	Sec. 27, T. R. 23E., SL	36S., B&M				
14. DISTANCE IN MILES A	Same	EST TOWN OR POST	OFFICE.			12. COUNTY OR PARISH	13. BTATE
	east of Blan	ding, Utah				San Juan	Utah
15. DISTANCE FROM PROPO LOCATION TO NEAREST	SED*	1	6. NO. OF ACRES	IN LEASE		OF ACRES ASSIGNED HIS WELL	
PROPERTY OR LEASE L (Also to nearest drig	INE. PT.	609	320			80	
18 DISTANCE FROM PROP	DEED LOCATION*		9. PHOPOSED DE	тн	20. ROTA	RY OR CABLE TOOLS	
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21. ELEVATIONS (Show whe	ther DF, RT, GR, etc.)					22. APPROX. DATE WOR	
Original		November	<u>20, 1984</u>				
23.	I	ROPOSED CASING	AND CEMENT	ING PROGRA	AM		
SIZE OF ROLE	BIZE OF CABING	WEIGHT PER FOO	T SETTI	NG DEPTH		QUANTITY OF CEMENT	
<del>18"</del>	<del></del>			\ I		D 1: 11:	

See attached 10-Point Plan Plan and Multipoint Surface Use and Operations Plan for Additional Information.



550 sx.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen zone. If proposal is to drill or deepen directionally, give pertinent depreventer program, if any.	or plug back, give data on present productive ata on subsurface locations and measured and	e sone and proposed new productive true vertical depths. Give blowout
24.  BIGNED Muhael D. Gordeson TITLE	Staff Engineer	DATE OCT. 4, 1984
(This space for Federal or State office use)		•
APPROVED BY S JAMES J. JAMES J. TITLE CONDITIONS OF APPROVAL, IF MY:	Acting DISTRICT MANAGER	1 4 NOV 1984

#### SKYLINE OIL COMPANY 10-POINT PLAN

Mustang Unit #27-43
NE SE Section 27, T. 36S., R23E., SLM
San Juan County, Utah
Lease No. U-46818

# 1. Geologic Name of the Surface Formation:

Dakota Formation (Lower Cretaceous)

# 2. Estimated Tops of Important Geologic Markers:

Entrada	1060'
Navajo	1260'
Chinle	2010'
Ismay	5930'
Desert Creek	6180'
Akah Shale	6280'
Incar Direct	

3. Water sands will be protected behind the surface pipe set at 2200'. Prospective oil bearing formations are the Ismay and Desert Creek.

### 4. Proposed Casing Program:

<u>Hole Size</u>	Csg. Size	& Weight	Cond.	Setting Depth	Cement
18"	14"	Tinhorn	New	50'	Redi-mix
12½"	9-5/8"	36#/ft.	New	2060'	800 sx.
8 3/4"	5ᇂ"	15.5/ft.	New	6350'	500 sx.

Actual cement volumes will be determined by caliper log plus adequate excess.

# 5. Pressure Control Equipment:

A 10" 3000 psi W.P. double gate hydraulic BOP will be set on a 10" 3000 psi W.P. casing head with screwed outlets. We will wait on cement 8 hours, nipple up the BOP assembly, and test BOP to 2000 psi. After testing the surface casing will be drilled out after a minimum 24 hrs. WOC. Pipe ram operation will be checked daily and blind rams operated when pipe is removed from the hole on trips.

#### 6. Drilling Mud Program

<u>Interval</u>	Program
0 - 2060'	Fresh water with gel required to maintain viscosity at 28-32 sec.
2060 - 4500'	Fresh water, low solids & non-dispersed MW: 8.8-9.0 Vis: 32-38 WL: 15-20
4500 - T.D.	Fresh water, low solids & lightly dispersed MW: 8.8-9.5 Vis: 36-40 WL: 10

#### 7. Auxiliary Equipment:

Auxiliary equipment to be used will consist of a Kelly cock and a full-opening drillpipe valve in open position on the rig floor at all times. A bit float will only be used while drilling the surface hole with air.

#### 8. Testing, Coring and Logging Program:

Two drillstem tests are possible - one each in the Ismay and Desert Creek Formations.

No coring is anticipated.

The following logs will be run:

GR-DIL-SFL	TD to base of surface casing
GR-FDC-CNL-Cal	TD to 4000'
GR-BHC Sonic	TD to base of surface casing w/GR
	run to surface

The completion program is anticipated as follows:

- A. Clean out casing to PBTD.
- B. Run GR-CBL-CCL log to 200' above cement top.
- C. Selectively perforate pay interval as determined by electric logs.
- D. Run packer and tubing. Stimulate pay interval as determined by well conditions.
- E. Flow test well to determine producing characteristics.
- F. If additional pay intervals are present, isolate initial pay interval and repeat steps C-E.
- G. Place well on production or shut well in pending installation of gas gathering system.

## 9. Anticipated Abnormal Pressures, Temperatures & Potential Hazards:

No abnormal pressures, temperatures or hazards are anticipated.

10. It is anticipated that drilling operations will commence on or about November 20, 1984 with approximately 20 days of drilling to reach T.D. Completion operations will require an additional 30-45 days.

#### MULTIPOINT SURFACE USE AND OPERATIONS PLAN

SKYLINE OIL COMPANY
MUSTANG UNIT #27-43
NE SE SEC. 27, T36S, R23E
SAN JUAN COUNTY, UTAH

LEASE NO. 46818

# 1. Existing Roads - Exhibits "A" and "B"

Exhibits "A" and "B" show the wellsite as staked and its position relative to existing towns, roads, wells and topography. To reach the wellsite, travel 4.5 miles north of Blanding, Utah on U.S. Highway 160. Turn right on gravelled county road in Recapture Canyon and go generally east for 2.4 miles to junction. Turn left at junction and travel 2.4 miles generally north and east to junction. Turn right and travel 4 miles generally southeast to lease road. Turn right onto gravelled lease road and travel approximately 1.6 miles to junction with lease road for Mustang Unit #22-34. Turn right onto access road for Mustang Unit #22-34 and travel approximately 0.6 miles to junction with lease road that goes into Alkali Canyon. Turn right onto lease road and travel approximately 1 mile to Mustang Unit #27-32. Continue on new access road for approximately 0.5 miles to location.

All existing roads are shown on Exhibits "A" and "B". The existing roads to be used are shown in blue with the planned access road shown in red.

All county roads are maintained and are all-weather roads.

The San Juan County Road Department (801-587-2231, Ext. 43) will be contacted and an encroachment permit obtained prior to the use of the county roads.

Maintenance to existing county roads may be done if required.

## 2. Planned Access Road:

The attached Exhibits "A" and "B" show the planned access road in red. The planned access road is within the Mustang Unit of which Skyline Oil Company is operator. The access road travels SE from the Mustang Unit #27-32 for approximately 0.5 miles to the location. On the southern end of the Mustang Unit #27-32 well location the proposed access road crosses three archeological sites. To protect these sites a gravel road base of 12" will be placed over the existing seismic trail to prevent disturbance to these sites. The access road will be flat bladed with an 18' running surface and total disturbed width of 22'. If production is

established, the access road will be water barred or brought to Class III Road Standards within 60 days of cessation of completion activities. Surfacing material will be gravel obtained through commercial sources.

The operator will furnish its dirt contractor with a complete copy of the approved APD with attachments prior to the initiation of any work associated with this APD.

If subsurface cultural material is exposed during construction, work in that spot will stop immediately and the San Juan Resource Area Office contacted. All personnel working in the area will be informed by the operator that they are subject to prosecution for disturbing archeological sites and/or removal of artifacts. Salvage or excavation of identified archeological sites will only be done if damage occurs.

The operator or his contractor will contact the San Juan Resource Area Office in Monticello, Utah (801-587-2201), 48 hours prior to beginning any work on public land.

Surface disturbance and vehicular travel will be limited to the approved location and access route. Any additional area required for operations will be approved in advance prior to any work.

# 3. Location of Existing Wells - Exhibit "B"

The locations of all existing wells within a one-mile radius of the proposed well are shown on Exhibit "B". The well types are as follows:

Gas wells	- 2	Abandoned wells	-	1
Oil wells	- 4	Injection wells	-	0
Water wells	- 0	Temp. abandoned wells	-	0
Drilling wells	- 0	Proposed wells	-	1

# 4. Location of Existing and/or Proposed Facilities - Exhibits "B" & "C"

The operator has production facilities consisting of a tank battery on the Mustang Unit #22-34, within a one-mile radius of the proposed well. Future production facilities will consist of tank batteries on each well location and a field-wide gas gathering system.

The proposed production facilities layout is shown on the attached Exhibit "C" at a 1" = 50' scale. All production equipment and production pit will be fenced. Two 500-barrel production/ storage tanks and one 300 bbl. water storage tank will be inside a 50'X 60' X 4.5' earthen retaining wall to prevent contamination in the unlikely event of a tank rupture. All flowlines will be buried if possible and have working pressures exceeding the highest pressure anticipated for their use.

All permanent (onsite for six months or longer) structures constructed or installed (including oil well pump jacks) will be painted a flat, nonreflective, earthtone color to match the standard environmental colors, as determined by the Rocky Mountain Five-State Inter-Agency Committee. All facilities will be painted within six (6) months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded.

If a tank battery is constructed on this lease, it will be surrounded by a dike of sufficient capacity to contain  $1\frac{1}{2}$  times the storage capacity of the battery.

All loading lines and valves will be placed inside the berm surrounding the tank battery.

All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to.

All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the District Manager.

All product lines entering or leaving hydrocarbon storage tanks will be effectively sealed.

Gas meter runs for each well will be located within five hundred (500) feet of the wellhead. The gas flowline will be buried from the wellhead and/or separator to the meter along with any other sections occurring on the pad. Meter runs will be housed and/or fenced.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three (3) months on new meter installations and at least quarterly thereafter. The Area Manager will be provided with a date and time for the initial meter calibration and all future meter-proving schedules. A copy of the meter calibration reports will be submitted to the Resource Area Office. All meter measurement facilities will conform with API standards for liquid hydrocarbons and AGA standards for natural gas measurement.

# 5. Location and Type of Water Supply:

Water used for drilling and completion operations will be obtained from Recapture Lake 4 miles north of Blanding, Utah.

Use of water for this operation will be approved by obtaining a temporary use permit from the Utah State Engineer (801) 637-1303 and by receiving permission from surface managing agency to use the land containing the water source.

# 6. Source of Construction Materials

No outside construction materials other than gravel will be required during drilling operations. Gravel, if required to stabilize the drillsite, will be obtained through an approved private source. No material will be obtained from Federal or Indian lands.

## 7. Methods of Waste Disposal

The reserve pit will not be lined with commercial bentonite to prevent seepage. Three sides of the reserve pit will be fenced with four strands of barbed wire before drilling starts. The fourth side will be fenced as soon as drilling is completed. The fence will be kept in good repair while the pit is drying and until rehabilitation is initiated.

A trash pit will be constructed near the mud tanks and dug at least six feet into solid undisturbed material. It will be totally enclosed with a fine wire mesh before the rig moves in. The road and pad will be kept litter free.

A burning permit is required for burning trash between May 1 and October 31. This can be acquired by contacting the State Fire Warden, John Baker, at (801) 587-2705.

Produced waste water will be confined to the unlined reserve pit for a period not to exceed 90 days after initial production. During the 90-day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the District Manager's approval.

## 8. Ancillary Facilities

None are planned.

# 9. Well Site Layout - Exhibits "D" & "E"

The top 12" of soil material will be removed from the wellsite and stockpiled separately on the north side of the pad. Topsoil along the access road will be reserved in place. The access road will enter the pad on the northwest side of the location as shown on Exhibit "E".

Exhibit "D" shows the wellsite cross-sections with the required amounts of cut and fill. Mud pits will be in at least 50% cut material.

### 10. Plans for Restoration of Surface:

- a. Immediately upon completion of drilling, all trash and and debris will be collected from the location and surrounding area. All trash and debris will be disposed of in the trash pit and will then be compacted and buried under a minimum of two feet of compacted soil.
- b. The operator or his contractor will contact the San Juan Resource Area Office in Monticello, Utah (801-587-2201), 48 hours before starting reclamation work that involves earthmoving equipment and upon completion of restoration measures.
- c. Before any dirt work to restore the location takes place, the reserve pit must be completely dry.
- d. All disturbed areas will be recontoured to blend as nearly as possible with the natural topography. This includes removing all berms and refilling all cuts.
- e. The stockpiled topsoil will be spread evenly over the disturbed area. All disturbed areas will be ripped 12" deep with the contour.
- f. Water bars will be built as follows to control erosion.

Grade	Spacing
2%	Every 200 feet
2-4%	Every 100 feet
4-5%	Every 75 feet
5+%	Every 50 feet

- g. Seed will be broadcast between October 1 and February 28 with the following prescription. A harrow or similar implement will be dragged over the area to assure seed cover.
  - 2 lbs./acre Indian Ricegrass (Oryzopsis hymenoides)
  - 2 lbs./acre Crested wheatgrass (Agropyron desertorum)
  - 1 lb/acre Fourwing saltbush (Atriplex canenscens)
  - 1 lb/acre Wild sunflower (Helianthus annuus)
- h. After seeding is complete, the stockpiled trees will be scattered evenly over the disturbed area. The access will be blocked to prevent vehicular access.

i. The reserve pit and that portion of the location not needed for production or production facilities will be reclaimed as described above. Enough topsoil will be kept to reclaim the remainder of the location at a future date. This remaining stockpile of topsoil will be seeded in place using the prescribed seed mixture.

### 11. Surface and Mineral Ownership:

The present Lessees of Record of Federal Lease U-48618 in Sec. 26, T.36S, R.23E are Skyline Oil Company and MCOR. The leasehold acreage is federal with the surface administered by the BLM.

#### 12. Other Information

The location and road will be along areas consisting of rock and wash material. Most of the areas to be disturbed have little soil development.

Vegetation includes Pinion Pine, Juniper, sagebrush, locoweed, and a few native grasses. Fauna consists of deer, rabbits, ground squirrels, lizards and assorted flying and crawling insects.

Grazing is the only surface use activity in the immediate area of the location.

No dwellings of any kind exist in the area. No archeological, historical or cultural sites are apparent. An archeological inspection report is included. If subsurface cultural or paleontological material is exposed during construction, work will stop immediately and the San Juan Resource Area Office contacted.

The will be no deviation from the proposed drilling program without prior approval from the District Manager. Safe drilling and operating practices will be observed. All wells, whether drilling, producing, suspended, or abandoned, will be identified in accordance with 43 CFR 3162.2.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3164.

The dirt contractor will be supplied with an approved copy of the surface use plan.

Upon completion of drilling operations, the BLM's representative will be notified of production and/or restoration plans.

This permit will be valid for a period of one (1) year from date of approval. After permit termination, a new application will be filed for approval for any future operations.

Any production facilities will be painted a single, low gloss, pastel color that blends in with the surrounding soil, rock and/or vegetation. Juniper Green color has been approved by the BLM for this application.

#### 13. Lessee's or Operator's Representative

Skyline Oil Company's representatives are Messers: Michael D. Anderson, Reed G. Spjut or Clifford E. Selin, 1200 Mellon Financial Center, 1775 Sherman Street, Denver, Colorado 80203, telephone (303) 860-9031.

#### Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions that presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct, and that work associated with the operations proposed herein will be performed by Skyline Oil Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

October 4 1984

Staff Engineer



# ARCHEOLOGICAL - ENVIRONMENTAL RESEARCH CORPORATION

P.O. Box 853 - Bountiful. Utah 84010 Tel.: 801 292-7061

September 21. 1984

Cultural Resource Evaluations of Proposed Well Subject:

Locations in the Alkali Canyon Locality of San

Juan County. Utah

Skyline Oil Company, 1984 Drilling Program on Mustang Units 27-43, 26-33, 26-42, 26-44, and Project:

22-43

Project No.: SKOC-84-4

Dept. of Interior 81-Ut-179 Permit:

Utah State U-84-26-73b

Mr. Michael Anderson, Skyline Oil Company, 1200 To: Mellon Financial Center, 1775 Sherman Street,

Denver, Colorado 80203

Mr. Ed Scherick, Area Manager, Bureau of Land Management, San Juan Resource Area, P.O. Box 1327, Monticello, Utah 84535

Mr. Rich Fike, BLM State Archeologist, Bureau of Info:

Land Management, University Club Building, 136

East South Temple, Salt Lake City, Utah 84111

Antiquities Section, Division of State History,

300 Rio Grande, Salt Lake City, Utah 84101

Department of the Interior Bureau of Land Management Utah State Office	Report Acceptable Yes No
Summary Report of pection for Cultural Resources	Mitigation Acceptable Yes No Comments:
port Title [A  L K A L I  C  A  N  Y  O N	METITI ITOICIAT ITOINE I
velopment Company Skyline Oil Compan	y, Mustang Units 27-43, 26-33, 26-42, 26-44
port Date $09 \cdot 17 \cdot 1984$ · $984 \cdot 198$ · $986 \cdot 198$ · $986 \cdot 198$ · sponsible Institution $48 \cdot 198$ · $986 \cdot 198$	4. Antiquities Permit No. 81-Ut-179
eldwork Location: TWN [3]6 S  Range	$2[3]^{E} $ Section(s) $[2]^{2}$ $[2]^{6}$ $[2]^{7}$
TWN Range  Source Area SJ TWN Range  PO: PONY EXPRESS BR: BEAR RIVER, PR: PRICE RIVER, BC: BOOK CLIFFS HR: HOUSE RANGE REIVER, DX: DX  KA: KANAB, ES: ESCAL ANTE. SJ: SAN JUAN, GR: GRASE: SAN RAFAEL, DM: DIAMOND MOUNTAIN,	.82 85 86 87 88 89 90 91 92 93 2
of 15 meter wide transects to well location. A 15 to 20 m. evaluated although it was differently center stakes were preser	ne archeologist, F. R. Hauck, walked a series cover the development area for each proposed wide buffer zone around each location was also cicult to ascertain the complete pad zone since at during the on-site inspection. Two 15 meterong each proposed access route. Roads to be
Linear Miles Surveyed [2]   1   1   1   1   1   1   1   1   1	10. Inventory Type [ ] 130 R=Reconnoisonce
Definable Acres Surveyed 118 123	It Intensive Somple.
Legally Undefinable Acres 11 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ices, if appropriate) 12. Number Since 121 1 1
were recorded during the evaluation found in the vicinity of Mustang 2 location was therefore moved about facilitate avoidance of the prehist habitation structure. Site 931R/2 scatter, possible campsite, situation	ons. Site 931R/1 (42Sa16622) was 26-42 and that well 13, 136 Y=Yes, No. 25 toric, significant BMIII single 2 (42Sa16623) consists of a limited lithic ted outside the eastern periphery of Mustang
26-44. This site is not considered disturbance by restricting the development.	ed significant but can be preserved from velopment of the well pad to the west side(over
Actual/Potential National Register Pro	perties Affected: consulted and no registered properties will The Alkali Ridge Archeological District is
Literature Search, Location/Date: Si	HPO 9-11-84
Conclusion/Recommendations:	onticello Area Office 9-12-84 ·
•	resource clearance be granted to
Skyline Qil	Company
based upon adherence to the stip	pulations noted on the reverse:

#8 cont.: upgraded for access were examined on for and from the vehicle. Mustang Unit No. 22-43 was found to be identical with Mustang Unit No. 4 which had been evaluated by AERC in June, 1982 (see report SKOC-82-7, dated 6-18-82). -This location was therefore not reexamined by F. R. Hauck during the present on-site inspection.

#11 cont.: of several large trees which have been flagged in red. In addition to the recording of these two newly identified sites, the archeologist examined the area adjacent to the proposed well locations to determine whether any known resource sites would be adversely affected by the development. The following known sites will not be disturbed by the develop-42Sa11221 outside access road to No. 26-42

42Sa11167 well out of range of No. 26-42

42Sa11223 and 14048 are not in the vicinity of No. 26-33 42Sa14045 is well out of range of No. 27-43

42Sa 8753 was just outside the southern periphery of Unit 27-43 but will be avoided since location of 27-43 was shifted to the north about 45 meters.

Sites 42Sa13710, 16593, and 14044 are adjacent to the access route to Unit 27-43. Site 42Sa16593, a recently recorded prehistoric ditch and site 42Sa13710, a habitation unit, will be crossed by the northern segment of the access road into Unit 27-43. These sites can be preserved by adherence to the stipulations given below and by placing a gravel road base on the access road in this locality. The western periphery of 42Sa14O44 will also be crossed by the access route into Unit 27-43. Disruption of this site by vehicle traffic can be curtailed by having a gravel road base placed in the seismic road that crosses the site. Gravel bases should be from 1 to 1.5 feet in depth and well packed to adequately allow heavy traffic and eliminate any disturbance to these three sites by road grading activities.

#### 16. CONTINUED:

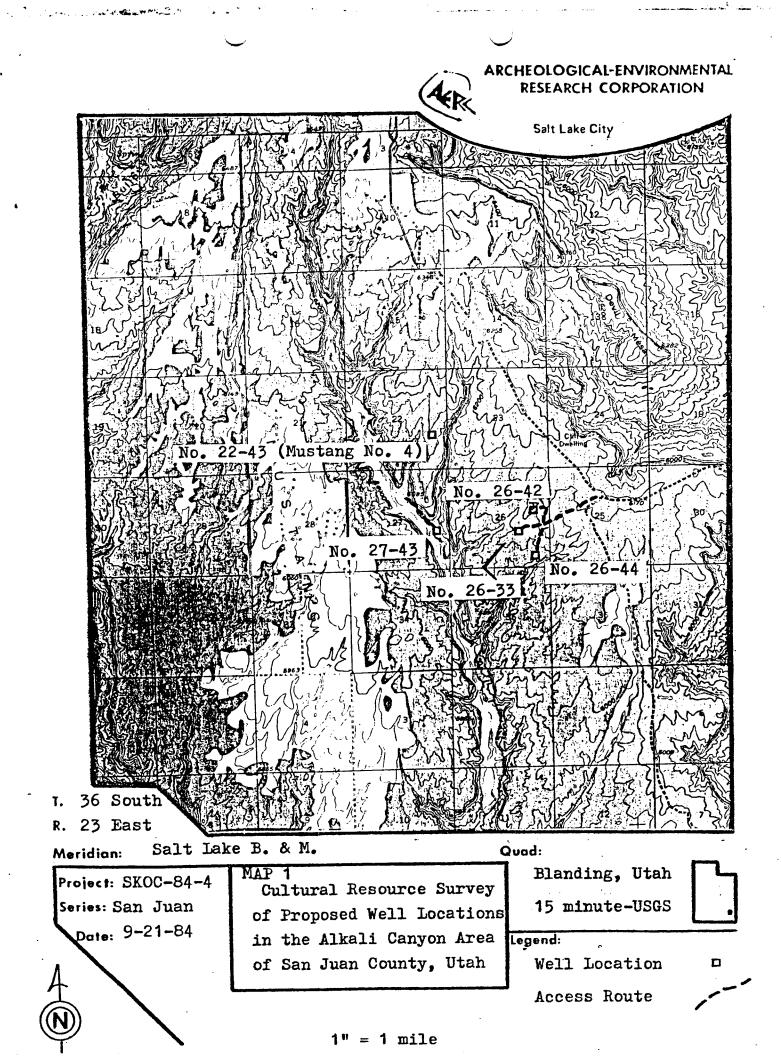
All vehicular traffic, personnel movement, and construction be confined to the locations examined and to the evaluated access roads. 2. All personnel refrain from collecting artifacts or from disturbing

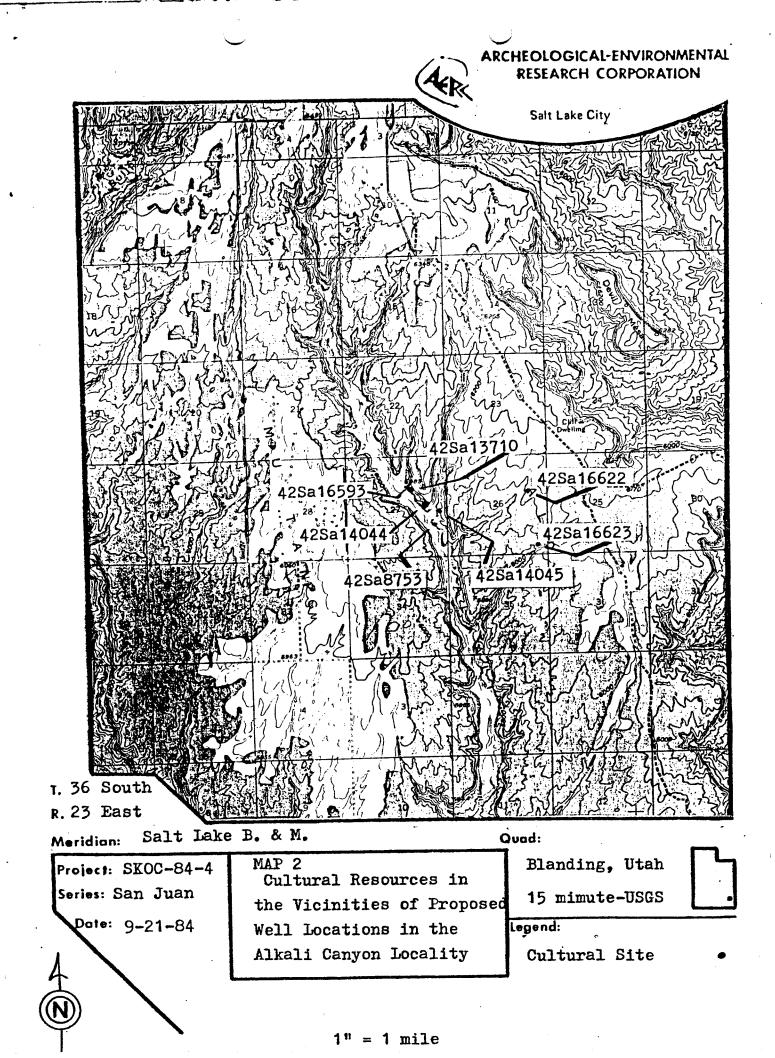
any cultural resources in the area.

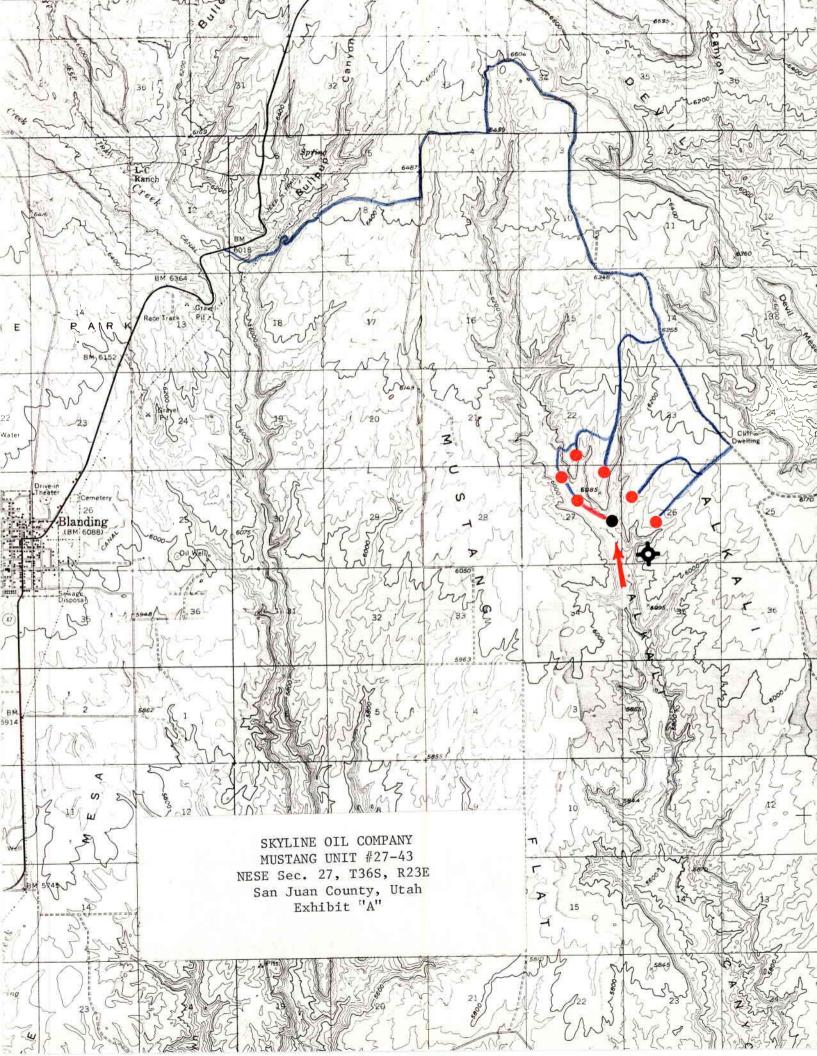
A qualified archeologist be consulted should cultural remains from subsurface deposits be exposed during construction work or if the need arises to relocate or otherwise alter the construction area.

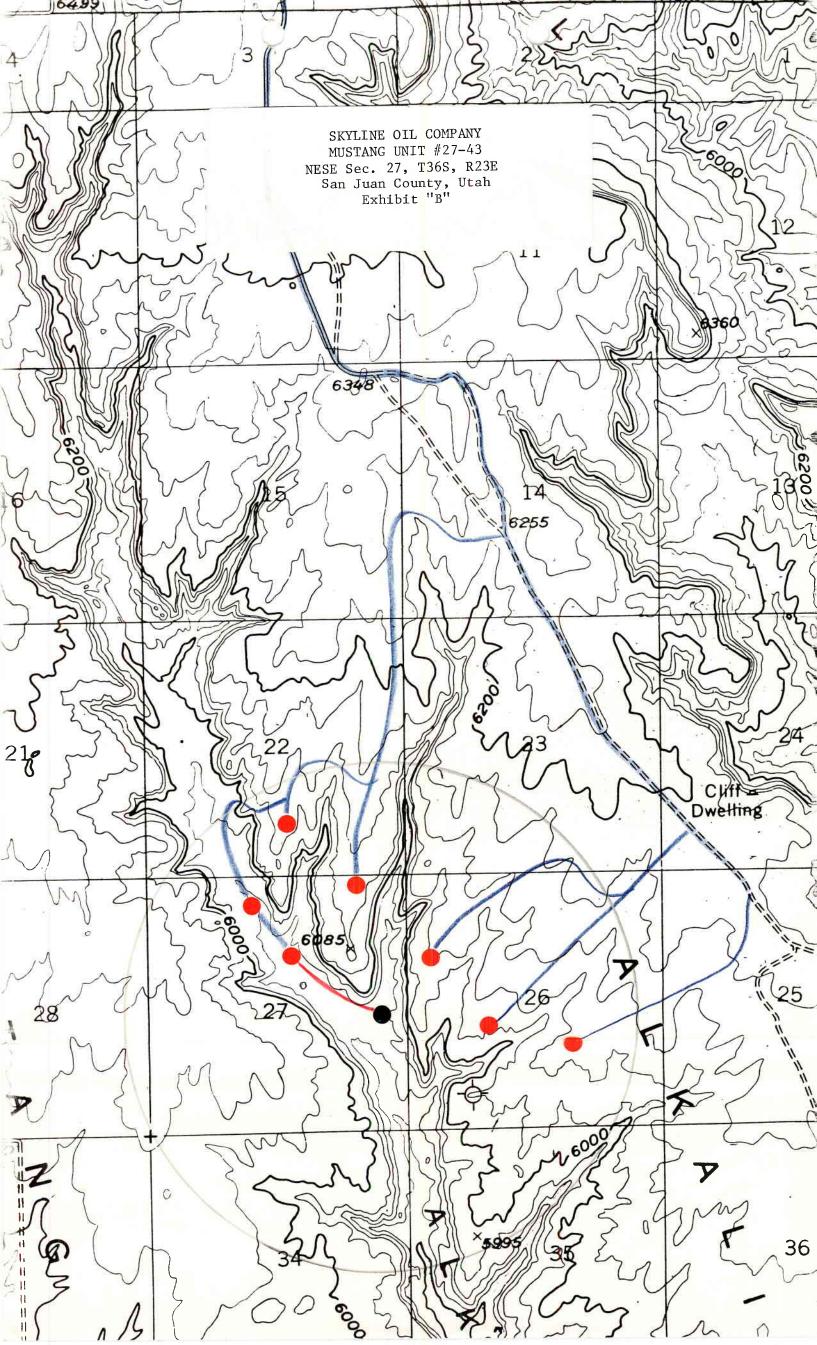
4. A qualified archeologist should monitor the construction of the access road and well location for Mustang Unit No. 27-43.

A gravel road base should be laid over segments of the access route to No. 27-43 in order to preserve sites 42Sa13710, 16593, and 14044 from disturbance.



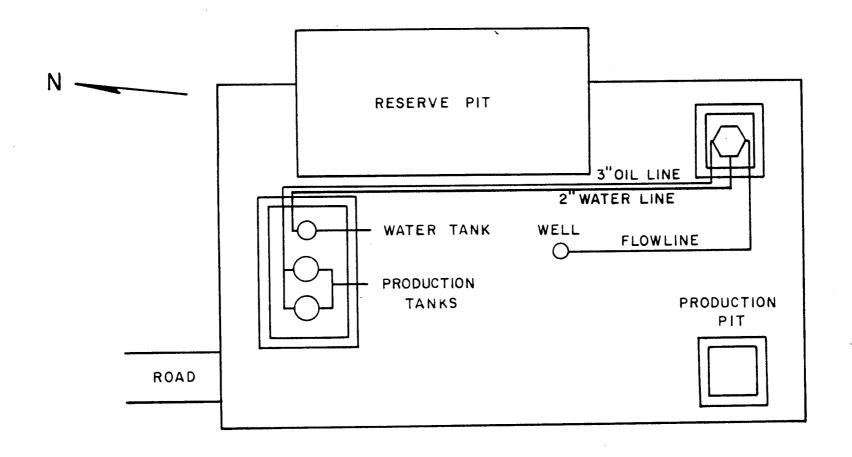




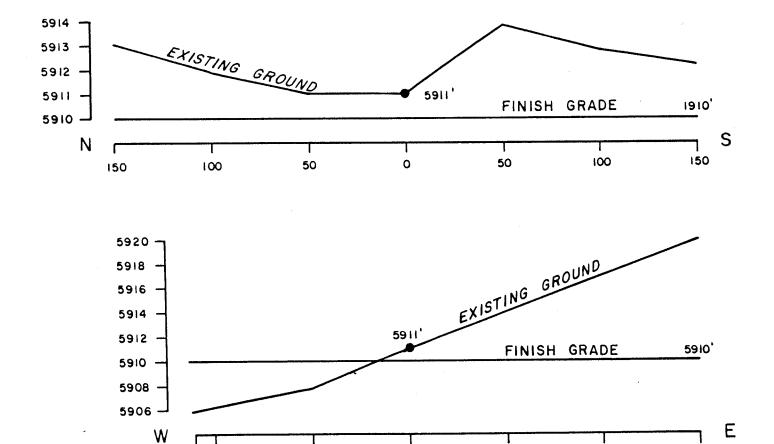


# SKYLINE OIL COMPANY MUSTANG UNIT 27-43

PRODUCTION FACILITIES



# SKYLINE OIL COMPANY MUSTANG UNIT 27-43 CROSS SECTIONS



110 100

EXHIBIT "D"

# SKYLINE OIL COMPANY MUSTANG UNIT 27-43 DRILL SITE LAYOUT

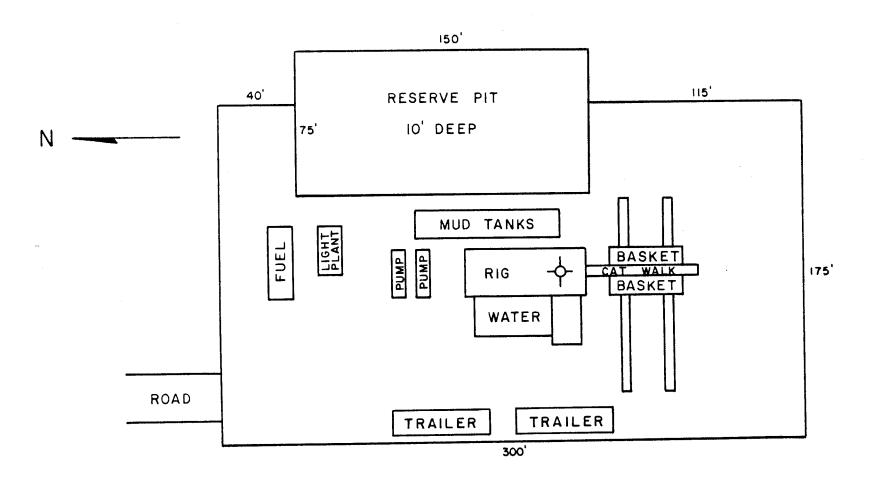


EXHIBIT "E"



4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

November 20, 1984

Skyline Oil Company 1775 Sherman Street, Suite 1200 Denver, Colorado 80203

#### Gentlemen:

Re: Well No. Mustang Unit 27-43 - NESE Sec. 27, T. 36S, R. 23E 2098' FSL, 609' FEL, San Juan County, Utah

Approval to drill the above referenced oil well is hereby granted in accordance with Section 40-6-18, Utah Code Annotated, as amended 1983; and predicated on Rule A-3, General Rules and Regulations and Rules of Practice and Procedure, subject to the following stipulations:

1. Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water.

In addition, the following actions are necessary to fully comply with this approval:

- Spudding notification to the Division within 24 hours after drilling operations commence.
- 2. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
- 3. Prompt notification to the Division should you detetermine that its necessary to plug and abandon this well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695 or R. J. Firth, Associate Director, (Home) 571-6068.
- 4. Compliance with the requirements and regulations of Rule C-27, Associated Gas Flaring, General Rules and Regulations, Oil and Gas Conservation.

Page 2 Skyline Oil Company Well No. Mustang Unit 27-43 November 20, 1984

5. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-037-31104.

Sincerely,

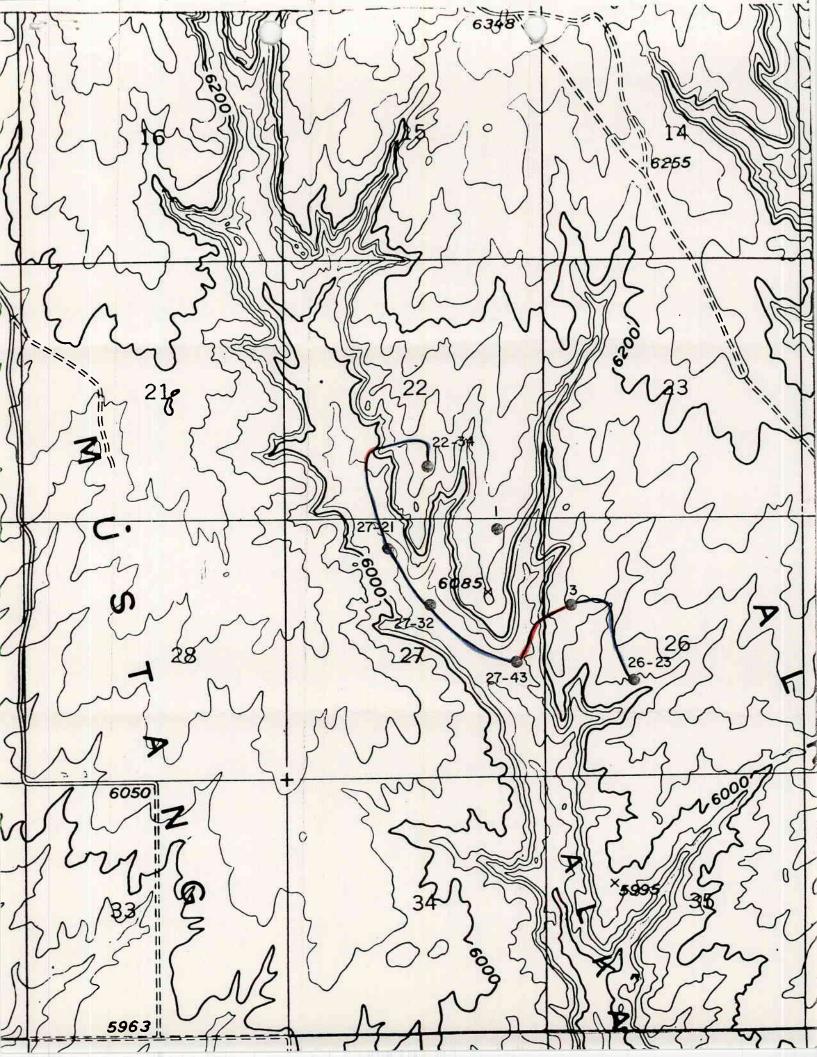
R. J. Firth

Associate Director, Oil & Gas

gl Enclosures cc: Branch of Fluid Minerals

Ferm 3166-5 (November 1983) (Formerly 9-331) DE	UNIT STATES PARTMENT OF THE INT		Form approved. Budget Bureau No. 1004-0135 Expires August 31, 1985  C. LEASS DESIGNATION AND SERIAL NO.
SUNDRY (Do not use this form	NOTICES AND REPORT for proposals to drill or to deepen or p "APPLICATION FOR PERMIT—" for st	S ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
1.			7. UNIT AGREEMENT NAME
OIL GAS GAS	OTHER		Mustang
2. NAME OF OPERATOR		:	
Texas Eastern Sk	yline Oil Company		Mustang Unit 9. wall #0. 22-34, 26-23,
	ite 1200, Denver, Colora	ado 80203	27-21, 27-32, 27-43 & 3
4. LOCATION OF WELL (Report	location clearly and in accordance with	any State requirements.	10. FIELD AND POOL, OR WILDCAT
See also space 17 below.) At surface			Mustang Flat
	ŧ .		11. SHC., T., B., M., OR BLK. AND SURVEY OR AREA
			Sec. 22, 26 & 27, T36S,
14. PERMIT NO.	15. ELEVATIONS (Show wheth	ber DP, R7, GR, etc.)	R23E, SLB&M 12. COUNTY OR PARISH   18. STATE
14. FBRM12 PV.			San Juan Utah
	D 7 1 1	( Ni to a Chief a Parat a	
	heck Appropriate Box To Indica		
Notici	of intention to:		EQUENT REPORT OF:
TEST WATER SHUT-OFF	PULL OR ALTER CASING	WATER SHUT-OFF	BEPAIRING WELL
FRACTURE TREAT	TULTIPLE COMPLETE	PRACTURE TREATMENT SHOOTING OR ACIDIZING	ALTERING CASING ABANDONMENT®
SHOOT OR ACIDIES REPAIR WELL	CHANGE PLANS	(Other)	
(Other)		(Note: Report resu	its of multiple completion on Well apletion Report and Log form.)
	PLETED OPERATIONS (Clearly state all per is directionally drilled, give subsurface	etingut datally and give pertinent dat	es, including estimated date of starting any ical depths for all markers and gones perti-
and reinjection compression and tion at well 26-map. Each well sections of the will be laid on at the Mustang U catcher at #27-4 to return liquid	system in the Mustang F. dehydration at wells 22-23. A 4" nominal gas power will be tied into the mapipeline shown in blue the surface. A central unit #3. Two slug catches will be installed. A	lat Field. The system of the s	" or 3" lateral. Those sections shown in red ssor will be installed and one inline slug 11 run from #3 to #27-43 tage liquid knockout on
•			
•			
18. I hereby certify that the	enteroing is take and correct		
81GNED//white	a pausa TITLE	Staff Engineer	Nov. 13, 1984
(This space for Federal o	r State office use)		
	TITLE		DATE
CONDITIONS OF APPRO			

\*See Instructions on Reverse Side



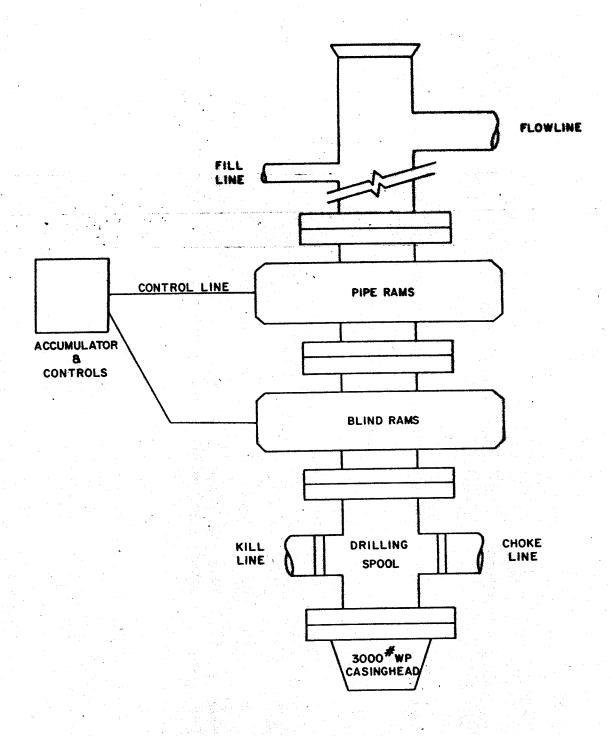
Form 3160-5 UNIT	FO STATES	SUBMIT IN TRIPLICATI	Budget Bureau Expires August  6. LEASE DESIGNATION	31, 1985
(Formerly 9-331) DEPARTMEN	F THE INTERI	OK verse side)	U-46818	AND BREIAL NO.
<del></del>	LAND MANAGEMEN		6. IF INDIAN, ALLOTTE	OR TRIBE NAME
SUNDRY NOTICES  (170 not use this form for proposals to Use "APPLICATION"	AND REPORTS ( drill or to deepen or plug to FOR PERMIT—" for such p	ON WELLS sack to a different reservoir.		
1.			7. UNIT AGBEEMENT HA	. M B
OIL XX WELL OTHER			Mustang	
2. NAME OF OPERATOR	\$ #		8. FARM OR LEASE WAS	
Texas Eastern Skyline	Oil Company		Mustang (	Init
S. ADDRESS OF OPERATOR			9. WELL NO.	
1775 Sherman, Suite 12	200, Denver, C	olorado 80203	27-43	
4. LOCATION OF WELL (Report location clearly a See also space 17 below.) At surface	ind in accordance with any	Btate requirements.	10. FIELD AND POOL, O	lat
2098' FSL & 609' FEL	(NE SE) Sec. 2	7, T365, R23E		736s, R23E,
14. PERMIT NO.   15.	BLEVATIONS (Show whether DP	, RT, GR, etc.)	SLB & M 12. COUNTY OR PARISE	18. STATE
			San Juan	Utah
	L=5911			- ULUIA
16. Check Appropr	iate Box to Indicate N	lature of Notice, Report, or		
NOTICE OF INTENTION TO	o: .	SUBS	EQUENT REPORT OF:	
TEST WATER SHUT-OFF PULL OF	R ALTER CASING	WATER SHUT-OFF	BEPAIRING	WELL
PRACTURE TREAT MULTIP	LE COMPLETE	FRACTURE TREATMENT	ALTERING C	ABING
SHOOT OR ACIDIZE ABANDO	N*	BHOOTING OR ACIDIZING	ABANDONME	*T*
REPAIR WELL CHANGE	PLANS XX	(Other)	ilts of multiple completion	on Well
(Other)  17. DESCRIBE PROPOSED OR COMPLETED OPERATION		Completion or Recor	inpletion Report and Log to	rm.)
Texas Eastern Skyline be made to the approvenance of the Blowou attached diagram.	ed Application	n for Permit to D	rill:	
B. Change item 5 of instead of "and t	Attachment "A' est BOP to 2,0	' to read, "and t 000 psi."	est BOP to 1,	000 psi"
		Control of the Contro	GEIVE	
		( dead and	NOV 2 3 1984	4
•		OiL	DIVISION OF , GAS & MINING	
18. I hereby certify that the foregoing is true		Staff Engineer	DATE 11/	20/84
SIGNED // /UNIULY A/ LANGE	TITLE		DATE	
(This space for Federal or State office use)	!	ACCE	OTED WED BMATHES	TATE
APPROVED BY	. TITLE	APPRO	TALL DIVISION	OF
Endoral approval of this action	1 m	OF U	TAH DIVISION	NG

OTL, GAS, AND MINING

Federal approval of this action is required before commencing

operations.

# SKYLINE OIL COMPANY



BLOWOUT PREVENTER SCHEMATIC

3000 psi WORKING PRESSURE

Form 3160-5 (November 1983) (Formerly 9-331)	UNITED STATES EPARTMENT F THE INTERI	BUBMIT IN TRIPLICATES (Other instructions of re-	Expires August  6. LEASE DESIGNATION	31, 1985
(Polificity 9=331)	BUREAU OF LAND MANAGEMENT		U-46818	
SUNDR'	Y NOTICES AND REPORTS ( for proposals to drill or to deepen or plug b "APPLICATION FOR PERMIT—" for such p	ON WELLS	6. IF INDIAN, ALLOTTER	OR TRIBE NAME
1.			7. UNIT AGREEMENT NA	MB
OIL S WELL S	OTHER	:	Mustang	
2. NAME OF OPERATOR		,	S. PARM OR LEADE HAM	
Texas Eastern Sk	yline Oil Company		Mustang Unit	
3. ADDRESS OF OPERATOR	<u> </u>		9. WELL NO.	
1775 Sherman St.	, Suite 1200, Denver, Color	ado 80203	27-43	
4. LOCATION OF WELL (Repor	t location clearly and in accordance with any	State requirements.	10. FIBLD AND POOL, O	WILDCAT
See also space 17 below.) At surface			Mustang Flat	
2098' FSL & 609'	FEL (NE SE) Sec. 27, T36S,	R23E	11. SEC., T., R., M., OR E SURVEY OR ARMA	LE. AND
	•		Sec. 27, T36S	•
			R23E, SLB&M	
14. PERMIT NO.	15. BLEVATIONS (Show whether DF	P, RT, GR, etc.)	12. COUNTY OR PARISE	18. STATE
	OGL-5911'		San Juan	Utah
- 4	CI I A . D T I I A	A ( Nation Parent on C	Wh D	
	Check Appropriate Box To Indicate N			
NOTIC	E OF INTENTION TO:	PERSON	ENT REPORT OF:	
TEST WATER SHUT-OFF	PULL OR ALTER CASING	WATER SHUT-OFF	REPAIRING V	VELL
FRACTURE TREAT	MULTIPLE COMPLETE	PRACTURE TREATMENT	ALTERING C	ABING
BHOOT OR ACIDIZE	ABANDON*	BEOOTING OR ACIDIZING	ABANDONME	lI
REPAIR WELL	CHANGE PLANS	(Other) Spud Notice		X
(Other)		(Norg: Report results Completion or Recompl	of multiple completion etion Report and Log for	on Well
	PLETED OPERATIONS (Clearly state all pertinent is directionally drilled, give subsurface loca	at details and give pertinent dates	including estimated dat	e of starting any
Drilling Rig. #5 Drilled 12½" hol	onductor casing. Cemented. Spud at 5:00 p.m. 11-21-e to 2055'.	-84.		
by 200 sx Class	'B'. Circulated 70 sx ceme 1-23-84. WOC 8 hours.	ent at surface. Displ	aced w/156 BW,	plug
Welded on 10" 30 Install BOP and Drill ahead.	00 psi WP casinghead. Prestest to 1000 psi-OK. PU 8-	ssure test casinghead -3/4" bit T1H and test	to 1000 psi-OK. casing to 1000	) psi-OK.
		•		
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•		al nfc	041984	
		500	V = 1304	
		man a h. C ff G <sup>rin</sup>		
		A property of the control of the con	SION OF	
18. I hereby certify that the	foregoing is This and sorrest	na. GAS	8 MINING	
SIGNED Muhaul		taff Engineer		26, 1984
(This space for Federal	or State office use)			
APPROVED BY	OVAL IF ANY:		DATE	

## \*See Instructions on Reverse Side

### GEOLOGICAL WELL REPORT

TEXAS EASTERN SKYLINE OIL CO.

Mustang Unit # 27-43

Sec. 27, T 36 S - R 23 E

San Juan Co. Utah

By: B. F. Latch Dec. 12, 1984

#### GEOLOGICAL REVIEW

TEXAS EASTERN SKYLINE OIL CO. Mustang # 27-43 Sec. 27, T 36 S - R 23 E

San Juan Co. Utah

 奜鴐篗腤瘱篗晿椺篗腤縺

#### GENERAL OPERATIONS

The drilling of this well was undertaken using rotary tools. Fresh water and a chemically treated gel mud were used as the circulating medium.

In order to protect fresh water aquifers and to insure against drilling problems, a protective string of 9-5/8" casing was set at a depth of 2042'. This is sufficient casing to cover all fresh water aquifers recognized in the area. Sufficient cement was run to circulate to the surface.

All drilling objectives were accomplished with a minimal amount of operational problems. At no time did situations arise that constituted an undue danger to either the drilling equipment or the personnel involved in the drilling operation.

#### **EVALUATION**

GEOLOGICAL SUPERVISION:

This well was under constant geological supervision from a depth of 4500' until the total depth of 6336' was reached.

SAMPLES:

Ten foot samples were caught from a depth of 4500' to

#### GEOLOGICAL REVIEW

the total depth of 6336'. Sample quality was fair to good. All samples were caught and microscopically examined while drilling was in progress.

#### MUD LOGGING:

A one man mud logging unit was utilized from a depth of 4500' until the total depth was reached. This unit was equipped with both a hot wire and a chromatograph for hydrocarbon analysis.

Several shows were encountered during the drilling of the well but only one was associated with sufficient porosity and was of proper magnitude to warrant a drill stem test in the eyes of the well site geologist.

#### CORES:

It was planned to core the upper Ismay pay zone in this well. This was accomplished with the cutting of two cores.

CORE # 1, 5960-6020 CUT 60' RECOVERED 38'.

CORE # 2, 6020-6078 CUT 58' RECOVERED 52'.

These cores were properly preserved and sent to Core
Laboratories in Farmington, New Mexico for analysis. Detailed
lithologic descriptions of these cores are appended to the
accompanying sample log.

#### DRILL STEM TESTS:

After field examination of the cores, it was felt advisable to further evaluate the apparent poor permeability

observed by conducting a drill stem test.

DST # 1, was conducted covering the interval 5965'-6080'. Poor fluid recoveries and low shut in pressures confirmed the visual examination conclusions of a thin porosity zone with poor permeability.

Detailed descriptions of pressures and pipe recoveries are appended to the accompanying sample log.

#### ELECTRICAL LOGGING:

Upon reaching a total depth of 6336', the following logs were run by Schlumberger.

DIL-SFL w GR		2052-6323
BHC SONIC w GR &	CALIPER	4500-6323
CNL-FDC w GR & CA	ALIPER	4500-6323
PROXIMITY MICRO L	_OG	4500-6323
CYBERLOOK		4500-6323

Evaluation of these logs revealed no additional zones of interest and confirmed the sample and mud log analysis of the prospective zones.

#### CONCLUSIONS

Evaluation of all information available indicated this well to have marginal economic value in the upper Ismay zone.

The cores indicate that there is a large increase in anhydrite and salt filled porosity in these wells on the southern flank of the field.

#### GEOLOGICAL REVIEW

These now established conditions should be taken into consideration when plans for additional development wells in this direction are made.

#### RECOMMENDATIONS

This test occupies a position that is higher struturally than anticipated, but displays inferior reservoir conditions in the pay zones.

It is quite probable that a very marginal producer can be accomplished by proper stimulation procedures.

Therefore, it was recommended that pipe not be set and a completion attempt not be made. Although the well may produce some oil, it appears to be uneconomic.

This test is well situated neither geographically nor structurally to be properly utilized as either disposal or as an injection well.

\*

## GEOLOGICAL REVIEW

IMPORTANT LOG TOPS

	AGE		FORMATION	DEPTH	DATUM
! !	Juras	ssic	Bluff	0859	+5065
i 	11	и	Summerville	1028	+4896
i !	11	H	Entrada	1068	+4856
 	11	н	Carmel	1088	+4836
} }	11	H .	Navajo	1210	+4714
 	11	u	Kayenta	1560	+4364
! !	**	n	Wingate	1630	+4294
: :	Trias	ssic	Chinle	2008	+3916

Shinarump

Moenkopi

Cutler

Hermosa

Ismay (upper)

Ismay (lower)

Permian

Pennsylvanian

" " " Desert Creek 6220 - 296
" " " Akah 6286 - 362

2668

2757

2940

4845

5953

6143

+3256

+3167

+2984

+1079

- 29

- 219

	TMENT OF THE INTERIGENCE  THE INTERIGENC		b. LEASE DESIGNATION U-46818	AND BREAL NO.
SUNDRY NO	OTICES AND REPORTS Copposals to drill or to deepen or plug be a location for permit—" for such pr	ON WELLS	. IF INDIAN, ALLOTTER	OR TRIBE NAME
			7. UNIT AUBREMBNT HA	MB
WELL WELL OTHER			Mustang	
2. NAME OF OPERATOR	0:1 0			186
Texas Eastern Skylin	ne Ull Company		Mustang Unit	
	1200, Denver, Colorado	80203	27-43	
4. LOCATION OF WELL (Report location	on clearly and in accordance with any	State requirements.	10. PIBLD AND POOL, O	M WILDCAT
See also space 17 below.) At surface			Mustang Flat	
	L (NE SE) Sec. 27, T36S	, R23E	Sec. 27, T36S	
		20 00 40	SLB&M	1 18. STATE
API #43-037-31104	18. BLEVATIONS (Show whether DF OGL-591		San Juan	Utah
AFI #43-037-31104	001 371	<u> </u>	Dair Gaarr	1 000
16. Check	Appropriate Box To Indicate N	lature of Notice, Report, o	or Other Data	
NOTICE OF IN	TENTION TO:	808	SEQUENT REPORT OF:	
TEST WATER SHUT-OFF	PCLL OR ALTER CASING	WATER BHUT-OFF	REPAIRING	WELL
PRACTURE TREAT	MULTIPLE COMPLETE	FRACTURE TREATMENT	ALTERING C	ABING
SHOOT OR ACIDIZE	ABANDON®	BHOOTING OR ACIDIZING	ABANDONME	NT*
REPAIR WELL	CHANGE PLANS	(Other)	sults of multiple completion	on Well
(Other) Complete	OPERATIONS (Clearly state all pertinen	Completion or Rec	ompletion Report and Log to	rm.)
<ol> <li>Clean out wellbe</li> <li>Run GR-CBL-CCL</li> <li>Perforate Upper 6080'-6086'.</li> </ol>	log from 6250' to 200' Ismay at 6050'-6058',	above cement top. 6062'-6070', 6076'-	6078', and	ows:
6. Recover frac flu	ids and test well.	7		
		· · · · · · · · · · · · · · · · · · ·	And the second second	
		•	DEC 24	1984
	! !			11
	•		OM, GAS & M	
			- mag comes CX 191	\$ 1 2 3 5 M 279
18. I hereby certify that the foregol	ng is true and correct	aff Engineer	12-	20-84
BIGNED ////////	TITLE DI		DATE	
(This space for Federal or State	e office use)			
APPROVED BY	IF ANY:		DATE	
- <del> </del>				4

# \*See Instructions on Reverse Side

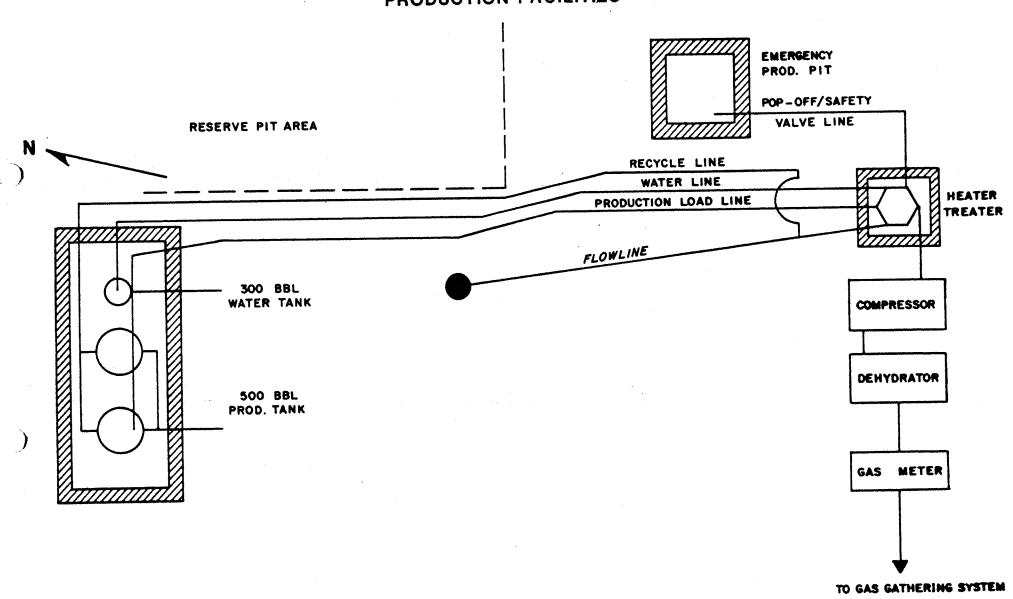
	UNITED STATE ARTMENT OF THE	INTERIOR verse alde)	OR PE D. LEARS	tres August 31, DESIGNATION AND 6818	
CULIDAY	UREAU OF LID MANA NOTICES AND REP		6. IF IND	IAN, ALLOTTER US	TOIDE NAME
V∞ "A	PPLICATION FOR PERMIT—	for such proposate.	7. UNIT	LORBEMBNT HAMB	
OFL X WELL OT	REL			tang	
. HAME OF OPERATOR			J	OR LEADE WAMB	
Texas Eastern Skyl:	ine Oil Company		Mus	tang Unit	
. ADDRESS OF OPERATOR	- 1000 Denver Co	lorado 80203	27-		
1775 Sherman, Suite	ation clearly and in accordance	e with any State requirements.		D AND POOL, OR W	ILDCAT
Bee also space 17 below.) At surface			Mus	tang Flat	
2098' FSL & 609' F	EL (NE SE) Sec. 27	, T36S, R23E	Sec.	27, T36S,	R23E,
4. PERMIT NO.	15. BLEVATIONS (Shor	w whether DP, RT, GR, etc.)	12. com	TTY OR PARISH 1	S. STATE
API # 43-037-31104	OG	L-5911'	San	Juan	Utah
6. Che	ck Appropriate Box To	Indicate Nature of Notice, Repo	ort, or Other Da	ła	
NOTICE O	F INTENTION TO:	1	SUBBRQUENT BEFO	RT OF:	
TEST WATER SHUT-OFF FRACTURE TREAT SHOOT OR ACIDIZS	PULL OR ALTER CASING Multiple complete Abandon*	WATER SHUT-OFF FRACTURE TREATM SHOOTING OR ACID LIGHT	IZING	REPAIRING WEI	ING
REPAIR WELL	CHANGE PLANS	(Viner, Pane	ory Update	ole completion on	Well X
(Other)	Claryla state	all pertinent details, and give pertine sourface locations and measured and to	r Recompletion kep	estimated date	of starting and
core #2 6020'-6077 Recovered 300' GCM	'. Cut 57' recove  1. Drilled 8 3/4"  2-55 STC casing to  1. Leed with 150 BW.	ore #1 5960-6020'. Cut ered 50'. Ran DST #1 59 hole to 6335'. Ran ele 6335'. Cemented with 3 Plug down 8:00 a.m. 12-	ectric logs. 330 sacks Cl	30-60-120-3 Ran 153 ass "H" pla	304.
		7			
	•	•	A Section of the sect	The state of the s	The second secon
		-		LEGO	2 4 1984
					3 + 10UT
				orl, gas &	
18. I hereby certify that the for	regoing is true and correct				
BIGNED MUMAUL N	! Challesa	TITLE Staff Engineer		DATE	20-84
(This space for Federal or	State office use)				
		TITLE	·	DATE	
CONDITIONS OF APPROV	AL, IF ANY:				

UNITED Williams 1983) Formerly 9-331)  BUREAU OF			Expires August 10. Lease Designation a U-46818	11, 1985
SUNDRY NOTICES AN	ID REPORTS	ON WELLS	6. IF INDIAN, ALLOTTER	OR TRIBE NAME
			7. UNIT AGREEMENT NAS	11
OIL XX OAB T			Mustang	
MALL CO WELL DIRECT	1		S. FARM OR LBASS HAM	
TEXAS EASTERN SKYLINE OIL COM	PANY		Mustang Unit	-
ADDRESS OF OPERATOR		2 1 1 00000	9. WELL NO.	
1775 Sherman Street, Suite 12	00, Denver,	Colorado 80203	27-43	
4. LOCATION OF WELL (Report location clearly and it See also space 17 below.) At surface			Mustang Flat	<u>-</u>
2098' FSL & 609' FEL (NE SE)	Sec. 27, T36	S, R23E	Sec. 27, T36 R23E SLB&M	
14. PERMIT NO.   18. BLEVA	TIONS (Show whether	DF, RT, QR, etc.)	12. COUNTY OR PARISE	18. STATE
14. ************************************	- 5911'		San Juan	Utah
		NIA (M.J. D. JA. )	When Deta	
16. Check Appropriate	Box to Indicate	Nature of Notice, Report, or C		
NOTICE OF INTENTION TO:		Paseds	UBNT REPORT OF:	
TEST WATER SHUT-OFF PULL OR ALT	ER CABING	WATER SHUT-OFF	REPAIRING V	FELL
PRACTURE TREAT MULTIPLE CO	OMPLETE	FRACTURE TREATMENT	ALTERING CA	LBING
SHOOT OR ACIDIZE ABANDON®		SECOTING OR ACIDIZING	ABANDONME	*T*
REPAIR WELL CHANGE PLA	NE X	(Other)	of multiple completion	on Well
(Other)  17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (C		Completion of Recomp	letion Rebott and rol to	100.)
2. Change item 4 of the	e Multipoint bbl. product	the attached diagram.  Surface Use and Operat ion tanks and one - 300 earthen retaining wall.	bbl. water	
		JAN 08 198  OIL, GAS & MININ		
18. I hereby certify that the foregoing is true and	correct	-, UAS & MINIT		
SIGNED Michael W Charles	V TITLE	Staff Engineer	DATE	mber 30, 1984
(This space for Federal or State office use)	:	ACCEPT	BY THE STA	TE
APPROVED BY	TITLE _	ACELOVEL	T DIVISION OF	<del></del>
CONDITIONS OF APPROVAL, IF ANY:	•	OF UTA	AND MINING	3
Federal approval of this action			185	
is required <b>before commencing</b> operations.	*See Instruct	DATE: 1/7	8 Burn	

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

# TEXAS EASTERN SKYLINE OIL COMPANY

MUSTANG UNIT #27-43
PRODUCTION FACILITIES



CORE ANALYSIS REPORT

FOR

SKYLINE OIL COMPANY

MUSTANG # 27-43 MUSTANG SAN JUAN,UTAH

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions these analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions or excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or excepted); but Core Laboratories is used or relied upon.

FILE NO

ANALYSTS : DS;EV

**ELEVATION: 5923 KB** 

: 3803-003364

# CORE LABORATORIES, INC. Petroleum Reservoir Engineering

DATE : 9-DEC-1984

FORMATION : ISMAY DRLG. FLUID: WBM

SKYLINE OIL COMPANY

MUSTANG # 27-43

HATU, MAUL MAR

MUSTANG

URLU. FLUIDI WEM LOCATION : NE,SE SEC. 27-T3S-R23E

FULL DIAMETER ANALYSIS-B.L. POROSITY

GRAIN FLUID SATS. PERM. TO AIR (MD) POR. SAMPLE DESCRIPTION DEN WTR OIL 90 DEG He MUMIXAM DEPTH NUMBER NO ANALYSIS ANHYDRITE-LM-SHALE 5960.0-98.0 CORE LOSS 5998.0-20.0 NO ANALYSIS ANHYDRITE 6020.0-34.0 NO ANALYSIS DOL SL/SHY 6034.0-37.0 DOL LIBRN VEXLN 2.83 0.0 81.4 0.03 7.3 0.17 6037.0-38.0 1 DOL LIBRN VEXLN SL/ANHY 81.6 2.82 7.8 0.0 0.24 0.11 6038.0-39.0 2 DOL LIBRN VEXLN SL/ANHY SL/CALC 2.81 84.7 0.0 0.02 6.4 0.04 6039.0-40.0 3 DOL LTBRN VFXLN SL/CALC 2.83 84.0 0.0 0.05 0.03 5.6 6040.0-41.0 4 DOL LTBRN VFXLN SL/ANHY SL/CALC 2.83 78.3 6.2 0.0 0.04 0.06 5 6041.0-42.0 DOL BRN VFXLN SL/ANHY SL/CALC 2.82 3.1 81.7 4.8 \* 6042.0-43.0 <0.01 6 DOL BRN VFXLN SL/ANHY SL/CALC 2.84 31.0 5.2 5.0 0.05 0.04 7 6043.0-44.0 DOL BRN VFXLN SL/ANHY SL/CALC \*\* 62.8 2.87 3.4 0.0 0.26 0.16 6044.0-45.0 8 DOL BRN VFXLN SL/ANHY SL/CALC 2.84 0.0 80.3 0.02 7.5 0.03 9 6045+0-46+0 DOL BRN VEXLN SL/ANHY SL/CALC \*\* 2.83 18.5 68.6 5.4 0.16 0.52 6046.0-47.0 10 DOL DKGRY VFXLN 2.82 85.9 0.0 2.5 0.02 0.01 6047.0-48.0 11 DOL LIGRY VEXLN SL/CALC SL/SHY 2.78 75.8 2.9 0.0 1.37 3.61 12 6048.0-49.0 DOL BRN VFXLN SL/ANHY SL/CALC 2.81 71.4 3.1 19.8 \* <0.01 13 6049.0-50.0 DOL BRN VFXLN SL/ANHY SL/CALC 2.82 82.3 7.1 0.0 0.09 0.02 6050.0-51.0 14 DOL BRN VFXLN SL/ANHY SL/CALC 2.84 73.7 0.0 6.3 0.06 0.03 6051.0-52.0 15 DOL BRN VFXLN SL/ANHY SL/CALC 55.6 2.83 7.2 0.0 0.71 0.19 6052.0-53.0 16 DOL BRN VFXLN SL/ANHY SL/CALC 2.87 0.0 75.6 8.9 \* 0.01 6053.0-54.0 17 DOL BRN VFXLN SL/ANHY SL/CALC 83.5 2.85 0.0 8.7 0.05 0.09 6054.0-55.0 18 DOL BRN VFXLN SL/ANHY SL/CALC 2.84 86.0 0.0 0.03 10.4 0.04 6055.0-56.0 19 DOL BRN VFXLN SL/ANHY SL/CALC 60.4 2.84 14.0 0.0 0.11 0.13 20 6056.0-57.0 DOL BRN VFXLN SL/ANHY SL/CALC 2.85 0.0 55.2 0.26 14.1 0.31 6057.0-58.0 21 DOL BRN FNXLN SL/ANHY \*\* 55.9 2.84 0.0 \* 11.0 5.64 6058.0-59.0 22 DOL-BRN FNXLN SL/ANHY 2.87 36.6 9.8 0.0 \* 0.19 23 6059.0-60.0 LM GRY VFXLN SL/ANHY 2.76 0.0 42.4 0.13 1.1 0.17 6060.0-61.0 24

# CORE LABORATORIES, INC. Petroleum Reservoir Engineering

DALLAS, TEXA

DATE

: 9-DEC-1984

FORMATION

: ISMAY

FILE NO : 3803-003364

ANALYSTS : DSFEV

FULL DIAMETER ANALYSIS-B.L. POROSITY

SAMPLE NUMBER	DEPTH	PERM. TO MAXIMUM		POR. He	FLUID	SATS. WTR	GRAIN DEN	DESCRIPTION
25 26 27 28 29 30 31 32 33 34 35 36	6061.0-62.0 6062.0-63.0 6063.0-64.0 6064.0-65.0 6065.0-66.0 6066.0-67.0 6067.0-68.0 6068.0-70.0 6070.0-71.0 6071.0-72.0 6072.0-73.0 6073.0-80.0	0.07 0.14 0.06 0.08 0.29 2.77 2.64 2.12 0.50 0.08 0.07	0.06 0.07 * 0.05 0.22 0.74 * 1.64 * 0.07 0.04	1.2 1.3 1.9 13.8 14.5 23.7 20.2 20.5 14.9 2.6 1.8	0.0 0.0 0.0 4.5 15.1 27.3 13.3 25.4 18.4 0.0	18.2 22.0 32.3 40.1 33.3 25.4 12.7 30.3 33.0 41.7 33.7 15.9	2.77 2.76 2.79 2.82 2.82 2.85 2.83 2.84 2.82 2.81 2.77	LM GRY VFXLN SL/ANHY LM GRY VFXLN SL/ANHY DOL LTBRN FNXLN SL/CALC DOL BRN FNXLN LM GRY VFXLN SL/CALC LM GRY VFXLN SL/ANHY SL/DOL CORE LOSS

<sup>\*\*</sup> DENOTES FRACTURE PERMEABILITY

SKYLINE OIL COMPANY

MUSTANG # 27-43

<sup>\*</sup> BAMPLE NOT SUITABLE FOR FULL DIAMETER ANALYSIS

# CORE LABORATORIES, INC. Petroleum Reservoir Engineering

DALLAS, TEXAS

SKYLINE OIL COMPANY MUSTANG # 27-43

: 9-DEC-1984 DATE : ISMAY FORMATION

FILE NO. ANALYSTS

: 3803-003364

: DS;EV

\*\*\* CORE SUMMARY AVERAGES FOR 1 ZONE \*\*\*

DEPTH INTERVAL:

6037.0 TO 6073.0

FEET OF CORE ANALYZED :

36.0

FEET OF CORE INCLUDED IN AVERAGES:

34.0

(UNCORRECTED FOR SLIPPAGE)

-- SAMPLES FALLING WITHIN THE FOLLOWING RANGES WERE AVERAGED --

10. 0.00 TO PERMEABILITY MAXIMUM RANGE (MD.) 100.0 TO 0.0 HELIUM POROSITY RANGE (%) 100.0 TO 0.0 OIL SATURATION RANGE (%) 100.0 TO 0.0 WATER SATURATION RANGE (%)

SHALE SAMPLES EXCLUDED FROM AVERAGES.

6037.0 TD 6073.0 AVERAGES FOR DEPTH INTERVAL:

AVERAGE PERMEABILITY (MILLIDARCIES) ARITHMETIC PERMEABILITY GEOMETRIC PERMEABILITY HARMONIC PERMEABILITY GEOMETRIC MAXIMUM & 90 DEG PERM.	-	0.63 0.16 0.07 0.07	PRODUCTIVE CAPACITY (MILLIDARCY-FEET) ARITHMETIC CAPACITY GEOMETRIC CAPACITY HARMONIC CAPACITY GEOMETRIC MAXIMUM & 90 DEG CAPACITY:	21. 5.4 2.3 2.4
AVERAGE POROSITY (PERCENT)	;	8.1	AVERAGE TOTAL WATER SATURATION : (PERCENT OF PORE SPACE)	51.3
AVERAGE RESIDUAL OIL SATURATION (PERCENT OF FORE SPACE)	:	7.7	AVERAGE CONNATE WATER SATURATION ** : (PERCENT OF PORE SPACE)	45.8

\*\* ESTIMATED FROM TOTAL WATER SAUTRATION.

# PERMEABILITY VS POROSITY

COMPANY: SKYLINE OIL COMPANY

WELL

: MUSTANG # 27-43

FIELD : MUSTANG

COUNTY, STATE: SAN JUAN, UTAH

AIR PERMEABILITY : MD - HORIZONTAL POROSITY

: PERCENT

( UNCORRECTED FOR SLIPPAGE )

HELIUM

PERMEABILITY AVERAGES POROSITY POROSITY PERMEABILITY RANGE & DEPTH HARMONIC GEOMETRIC ARITHMETIC **AVERAGE** MIN. MAX. MUNIXAM MUNINIM SYMBOL INTERVAL

6073.0 6037.0 -

0.001 1 (+)

10.0

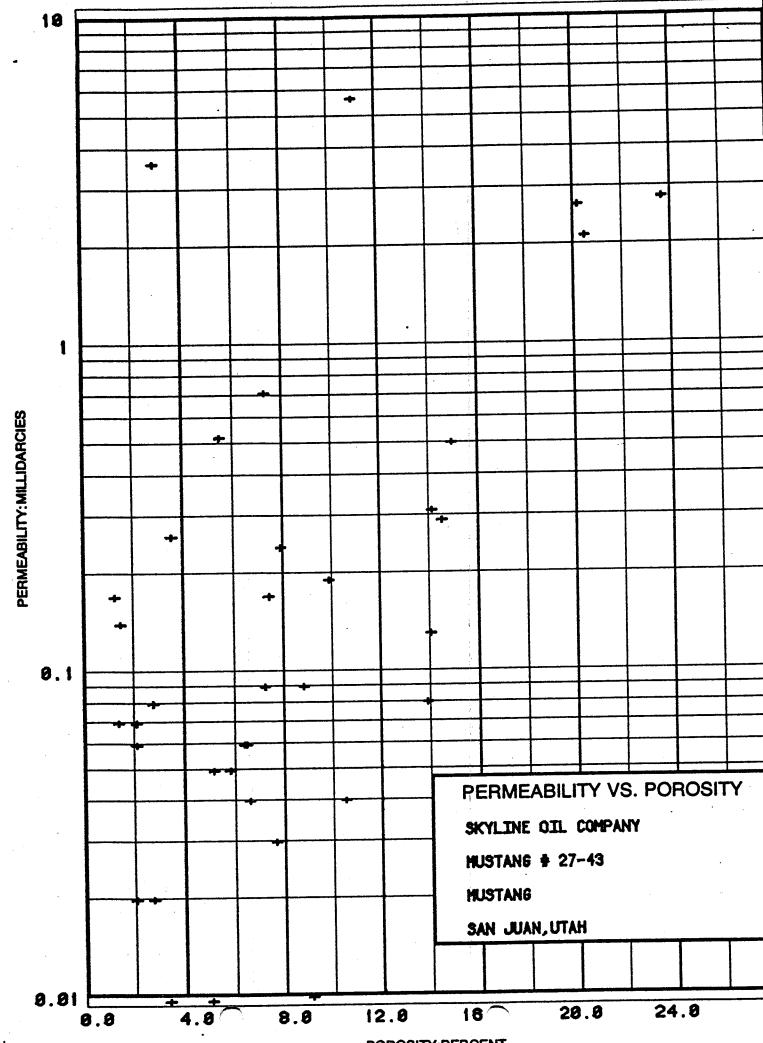
0.0 46.0

7.9

0.59

0.01

0.12



STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: SKYLINE OIL COMPANY

WELL

: MUSTANG # 27-43

: MUSTANG FIELD

COUNTY, STATE: SAN JUAN, UTAH

RANGE USED HORIZONTAL AIR PERMEABILITY : MD.

POROSITY

: PERCENT

HELIUM

0.001 TO 10.

0.0 TO 46.0 RANGE USED

(PERMEABILITY UNCORRECTED FOR SLIPPAGE)

DEPTH LIMITS

6037.0 -

6073.0

INTERVAL LENGTH :

36.0

FEET ANALYZED IN ZONE

36.0

LITHOLOGY EXCLUDED : NONE

DATA SUMMARY

PERMEABILITY AVERAGES POROSITY HARMONIC GEOMETRIC ARITHMETIC AVERAGE 0.12 0.01 0.59 7.9

# STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: SKYLINE OIL COMPANY

WELL

: MUSTANG # 27-43

FIELD : MUSTANG

COUNTY, STATE: SAN JUAN, UTAH

# GROUPING BY POROSITY RANGES

POROSITY	FEET IN	AVERAGE	AVERAGE	PERM.	FREQUENCY	CUMULATIVE
RANGE	RANGE	POROSITY	(GEOM+)	(ARITH)	(PERCENT)	FREQUENCY (%)
0.0 - 2.0 2.0 - 4.0 4.0 - 6.0 6.0 - 8.0 8.0 - 10.0 10.0 - 12.0 12.0 - 14.0 14.0 - 16.0 20.0 - 22.0 22.0 - 24.0	6.0 5.0 4.0 8.0 3.0 2.0 1.0 4.0 2.0	1.5 2.9 5.2 7.0 9.1 10.7 13.8 14.4 20.4	0.072 0.094 0.050 0.101 0.056 0.475 0.080 0.276 2.4 2.8	0.088 0.795 0.156 0.175 0.097 2.8 0.080 0.308 2.4 2.8	16.7 13.9 11.1 22.2 8.3 5.6 2.8 11.1 5.6 2.8	16.7 30.6 41.7 63.9 72.2 77.8 80.6 91.7 97.2

TOTAL NUMBER OF FEET = 36.0

# STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: SKYLINE OIL COMPANY

WELL

: MUSTANG # 27-43

FIELD : MUSTANG

COUNTY, STATE: SAN JUAN, UTAH

# GROUPING BY PERMEABILITY RANGES

PERMEABILITY	FEET IN	AVERAGE	PERM.	AVERAGE	FREQUENCY	CUMULATIVE
RANGE	RANGE	(GEOM.)	(ARITH)	POROSITY	(PERCENT)	FREQUENCY (%)
0.005 - 0.010 0.010 - 0.020 0.020 - 0.039 0.039 - 0.078 0.078 - 0.156 0.156 - 0.312 0.312 - 0.625 0.625 - 1.250 1.250 - 2.500 2.500 - 5.000 5	2.0 1.0 3.0 9.0 6.0 7.0 2.0 1.0 3.0	0.005 0.010 0.023 0.054 0.099 0.227 0.510 0.710 2.1 3.0 5.6	0.005 0.010 0.023 0.056 0.102 0.233 0.510 0.710 2.1 3.0 5.6	3.9 8.9 3.9 5.0 7.9 8.3 10.1 7.2 20.5 15.6 11.0	5.6 2.8 8.3 25.0 16.7 19.4 5.6 2.8 2.8	5.6 8.3 16.7 41.7 58.3 77.8 83.3 86.1 88.9 97.2

TOTAL NUMBER OF FEET = 36.0

# CORE LABORATORIES, INC. Petroleum Reservoir Engineering

# STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: SKYLINE OIL COMPANY

WELL.

: MUSTANG # 27-43

FIELD : MUSTANG

COUNTY, STATE: SAN JUAN, UTAH

# POROSITY-FEET OF STORAGE CAPACITY LOST FOR SELECTED POROSITY CUT OFF

POROSITY CUT OFF	FEET LOST	CAPACITY LOST (%)	FEET REMAINING	CAPACITY REMAINING (%)	ARITH MEAN	MEDIAN
0.0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0 22.0 24.0	0.0 6.0 11.0 15.0 23.0 28.0 29.0 33.0 33.0 35.0 36.0	0.0 3.2 8.3 15.6 35.2 44.8 52.4 57.2 77.4 77.4 77.4	36.0 30.0 25.0 21.0 13.0 10.0 8.0 7.0 3.0 3.0 1.0	100.0 96.8 91.7 84.4 64.8 55.2 47.6 42.8 22.6 22.6 22.6 8.3 0.0	7.9 9.2 10.4 11.4 14.2 15.7 17.0 17.4 21.5 21.5 21.5	6.8 7.5 8.3 9.7 14.3 15.0 15.5

TOTAL STORAGE CAPACITY IN POROSITY-FEET = 284.8

# STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: SKYLINE OIL COMPANY

WELL

# MUSTANG # 27-43

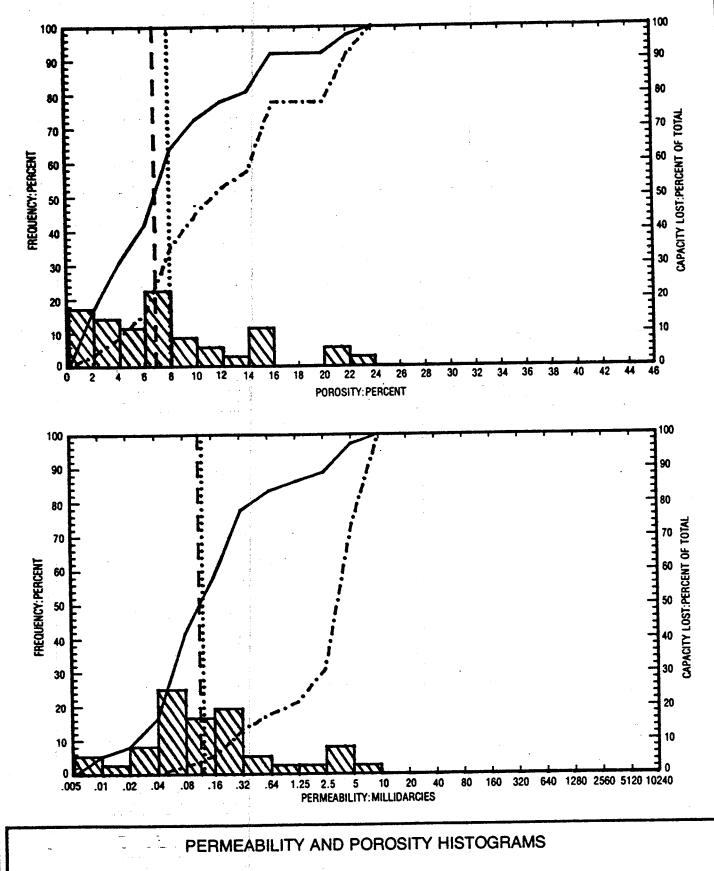
FIELD : MUSTANG

COUNTY, STATE: SAN JUAN, UTAH

# MILLIDARCY-FEET OF FLOW CAPACITY LOST FOR SELECTED PERMEABILITY CUT OFF

PERMEABILITY	FEET	CAPACITY	FEET	CAFACITY	GEOM	MEDIAN
CUT OFF	LOST	LOST (%)	REMAINING	REMAINING (%)	MEAN	
0.005 0.010 0.020 0.039 0.078 0.156 0.312 0.625 1.250 2.500 5.	0.0 2.0 3.0 6.0 15.0 21.0 28.0 30.0 31.0 32.0 35.0	0.0 0.0 0.1 0.4 2.8 5.6 13.3 18.0 21.4 31.3 73.6	36.0 34.0 33.0 30.0 21.0 15.0 8.0 6.0 5.0 4.0	100.0 100.0 99.9 99.6 97.2 94.4 86.7 82.0 78.6 68.7 26.4	0.12 0.16 0.17 0.21 0.38 0.66 1.66 2.46 3.16 3.49 5.64	0.11 0.12 0.13 0.16 0.24 0.37 2.50 3.15

TOTAL FLOW CAPACITY IN MILLIDARCY-FEET (ARITHMETIC) = 21.33



SKYLINE OIL COMPANY
MUSTANG # 27-43
MUSTANG
SAN JUAN, UTAH

#### LEGEND

ARITHMETIC MEAN POROSITY
GEOMETRIC MEAN PERMEABILITY
MEDIAN VALUE
CUMULATIVE FREQUENCY
CUMULATIVE CAPACITY LOST

• • • • • • • • • • • • • • • • • • • •
•

# CORE LABORATORIES, INC.



## Petroleum Reservoir Engineering

COMPANY	SKYLINE	OIL COM	PANY	3			FILE NO	3803-003304
WELL	MUSTANG	+ 27-43				· · · · · · · · · · · · · · · · · · ·	DATE	9-DEC-1984
FIELD	MUSTANG			FORMATION _	UPPER	ISMAY	ELEV	5923 KB
COUNTY	SAN JUAN	<b>.</b>	STATE UTAH	DRLG. FLD			CORES_	
LOCATIO			-T35-R23E			- 35 g		

# CORRELATION COREGRAPH

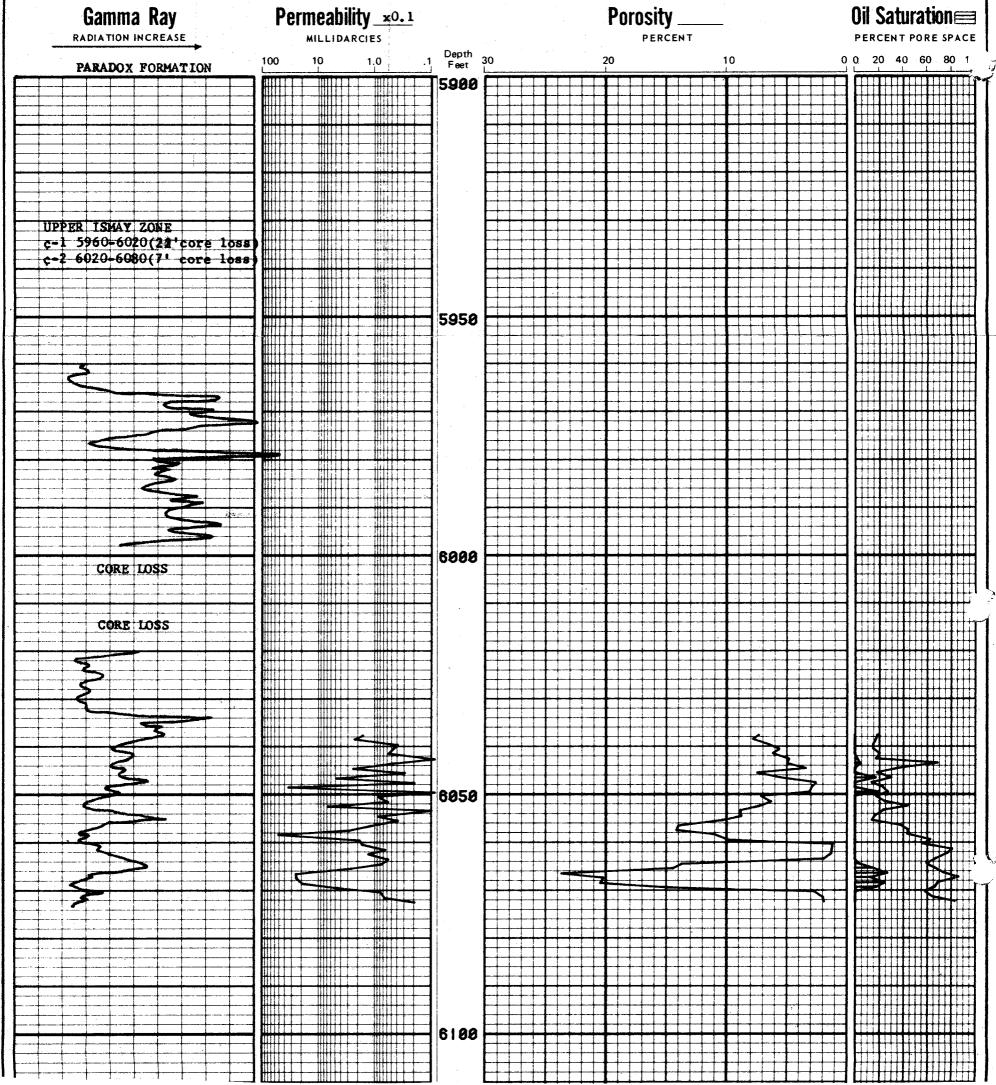
These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc., (all errors or omissions excepted); but Core Laboratories, Inc., and its officers and employees, assume no responsibility and make no warranty or representations as to the productivity, proper operation, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

VERTICAL SCALE: 5" = 100'

Total Water\_\_\_

PERCENT PORE SPACE

2amma Day Dormoshility -0.1 Dorocity Mil Saturation



\$1972 - CORE LABORATORIES, INC.



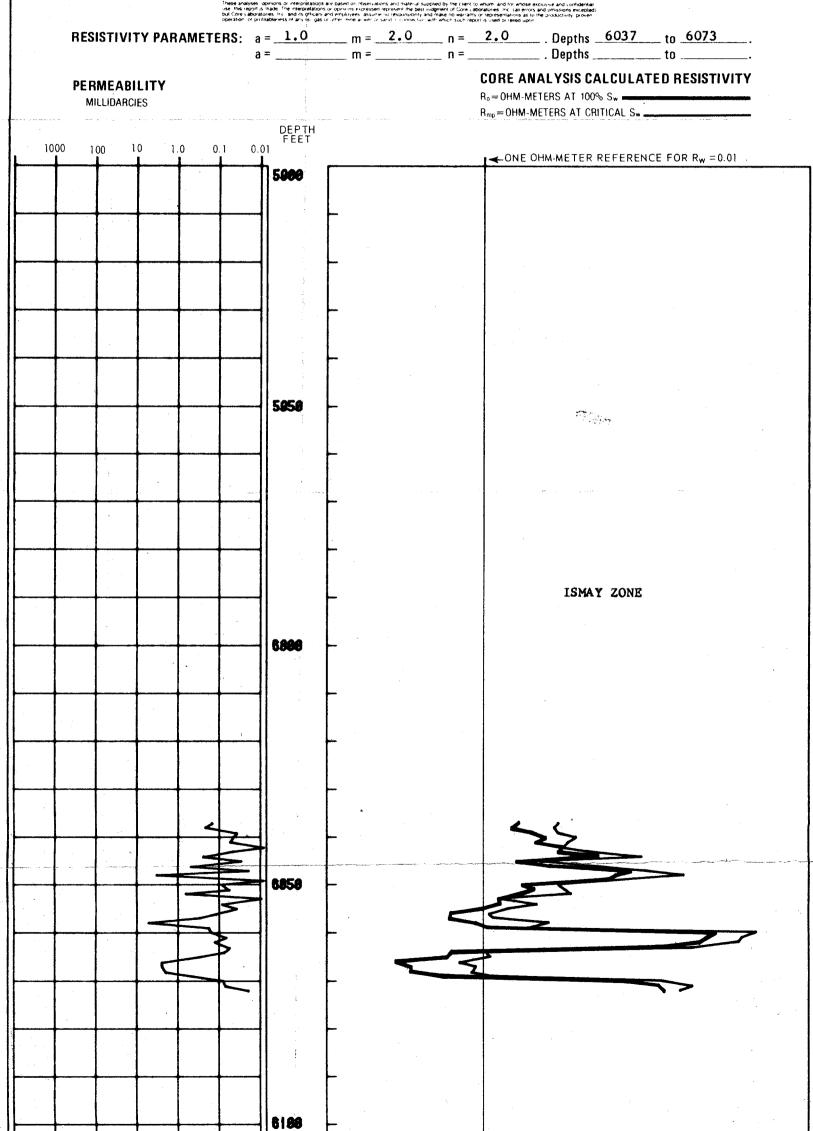
# CORE LABORATORIES, INC.

Petro	oleum	Res	ervoir	Eng	inee	ring

COMPANY	SKYLINE O	IL COMPANY		FILE NO	3803-003364
WELL	MUSTANG #	27-43	DATE 9-DEC-1984	ENGRS	DS; EV
FIELD	MUSTANG		FORMATION ISMAY	ELEV.	5923 кв
COUNTY	SAN JUAN	STATE_UT	AH DRLG. FLD. WBM	CORES	

# CORES LOG CORE and RESISTIVITY EVALUATION

. . .



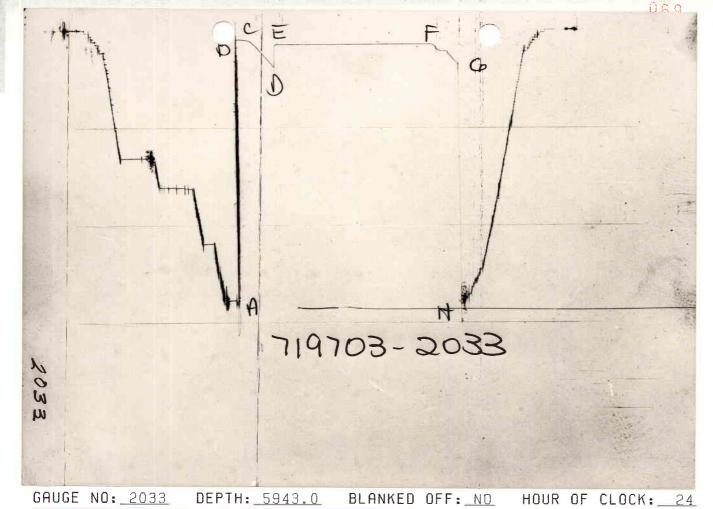
Form 3160-5 (November 1983) (Formerly 9-331)  DEPARTMEN OF LAND MANAGEMENT  BUREAU OF LAND MANAGEMENT	Form approved. Budget Bureau No. 1004-0135 Expires August 31, 1985  LEASE DESIGNATION AND SERIAL NO. U-46818
SUNDRY NOTICES AND REPORTS ON WELLS  (I/o not use this form for proposals to drill or to deepen or plug back to a different reservoir.  Use "APPLICATION FOR PERMIT—" for such proposals.)	6. IF INDIAN, ALLOTTES OR TRIBE NAME
I.	7. UNIT AGREEMENT HAME
OIL X GAB OTHER	Mustang
2. HAMB OF OPBRATOR	8. FARM OR LBASS HAME
TEXAS EASTERN SKYLINE OIL COMPANY	Mustang Unit
3. ADDRESS OF OPERATOR	9. WELL NO. 27-43
1775 Sherman St., Suite 1200, Denver, Colorado 80203  LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*	10. PIBLD AND POOL, OR WILDCAT
See also space 17 below.)  At surface	Mustang Flat
2098' FSL & 609' FEL (NESE) Sec. 27, T36S, R23E	11. SEC., T., B., M., OR BLK. AND SURVEY OR ABBA Sec. 27, T36S,
	R23E, SLB&M
14. FERMIT NO. 18. BLEVATIONS (Show whether DF, RT, GR, etc.)	12, COUNTY OR PARISH 18, STATE
API #43-037-31104   OGL - 5911'	San Juan Utah
Check Appropriate Box To Indicate Nature of Notice, Report	, or Other Data
TEST WATER SHUT-OFF PULL OR ALTER CASING WATER SHUT-OFF	BEPAIRING WELL
FRACTURE TREAT MULTIPLE COMPLETE PRACTURE TREATMENT  BROOT OR ACIDIZE ABANDON* SHOOTING OR ACIDIZE	NO   12   12   12   12   12   12   12   1
REPAIR WELL CHANGE PLANS GOTTING OR ACIDIES (Other)	Dil Production X
(Other)	results of multiple completion on Well Recompletion Report and Log form.)
Cleaned out casing to 6250': Ran GR-CBL-CCI Cement top @ 4850'.  Perforated Upper Ismay 6050'-6058', 6062'-60	-
Acidized well with 11,500 gals. 28% HCl.	
Flowing well recovering load water and oil.	
First oil production occurred on 1-4-85.	
18. I hereby certify that the foregoing is true and correct  SIGNED STATE Staff Engineer	DATE 1-9-85
(This space for Federal or State office use)	
APPROVED BY	DATE

# \*See Instructions on Reverse Side

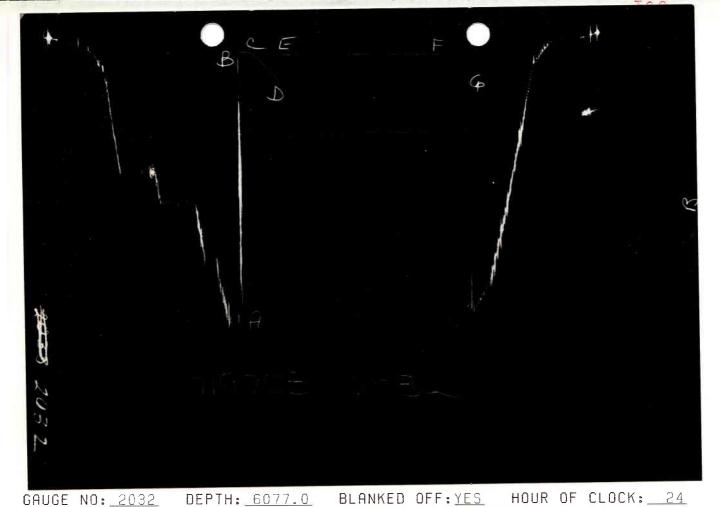


TICKET NO. 71970300 07-DEC-84 FARMINGTON

FORMATION TESTING SERVICE REPORT



			TED OIL	110011	or crock	•
ID	DESCRIPTION		SSURE	TI		TYPE
A	INITIAL HYDROSTATIC	2798	2768.3	REPORTED	CALCULATED	
В	INITIAL FIRST FLOW	134	105.9			
С	FINAL FIRST FLOW	147	110.8	30.0	30.0	F
С	INITIAL FIRST CLOSED-IN	147	110.8			
D	FINAL FIRST CLOSED-IN	401	380.1	60.0	60.0	L'
Е	INITIAL SECOND FLOW	187	155.1	100.0	201 7	-
F	FINAL SECOND FLOW	134	141.6	120.0	361.7	F
F	INITIAL SECOND CLOSED-IN	134	141.6	204.0	C2 7	
G	FINAL SECOND CLOSED-IN	348	345.3	304.0	63.7	L
Н	FINAL HYDROSTATIC	2932	2750.5			



TIME REPORTED | CALCULATED PRESSURE TYPE DESCRIPTION ID REPORTED | CALCULATED 2849.9 A INITIAL HYDROSTATIC 2836 В INITIAL FIRST FLOW 160 172.0 F 30.0 30.0 147 178.3  $\mathbb{C}$ FINAL FIRST FLOW 178.3 INITIAL FIRST CLOSED-IN 147  $\mathbb{C}$ 60.0 60.0  $\mathbb{C}$ 451.7 FINAL FIRST CLOSED-IN 453  $\square$ Ε INITIAL SECOND FLOW 200 228.4 F 120.0 361.7 F FINAL SECOND FLOW 213 206.8 206.8 F INITIAL SECOND CLOSED-IN 213 304.0 63.7 C FINAL SECOND CLOSED-IN 400 413.6 G FINAL HYDROSTATIC 2836 2768.2 H

EQUIPMENT & HOLE DATA	TICKET NUMBER: 71970300
FORMATION TESTED: UPPER ISMAY	DOTE NO. 1
NET PAY (ft):	DATE: 12-4-84 TEST NO: 1
GROSS TESTED FOOTAGE: 115.0	TYPE DST:OPEN HOLE
ALL DEPTHS MEASURED FROM: KB	THE USI: OF ENTIOLE
CASING PERFS. (ft):	HALLIBURTON CAMP:
HOLE OR CASING SIZE (in): 8.750	FARMINGTON
ELEVATION (ft): 5923  TOTAL DEPTH (ft): 6080.0	
0) [2]	TESTER: GENE ROBERTS
PACKER DEPTH(S) (ft): <u>5959, \$965</u>	I lesier:
FINAL SURFACE CHOKE (in):	
BOTTOM HOLE CHOKE (tn): 0.750	WITNESS: B.F. LATCH
MUD WEIGHT (16/gal): 9.00	
MUD VISCOSITY (sec): 33	Table SouthOoton
ESTIMATED HOLE TEMP. (°F): 120	DRILLING CONTRACTOR:
ACTUAL HOLE TEMP. (°F): <u>136</u> <u>6076.0</u> ft	YOUNG DRILLING #5
FLUID PROPERTIES FOR	
RECOVERED MUD & WATER	SAMPLER DATA
SOURCE RESISTIVITY CHLORIDES	Pstg AT SURFACE: 250
PIT SAMPLE 2.860 @ 58 °F 2485 ppm	cu.ft. OF GAS: 0.52
TOP SAMPLE 4.100 6 62 °F 1636 ppm	<b>■</b>
SAMPLER 4.040 © 56 °F 1758 ppm	00 0. 0.1.
	CC UF WHIEK:U
	cc OF MUD:1500
	TOTAL LIQUID cc:1500
LIVEROCOBBON BENDERTIES	CUSHION DATA
<b>!</b>	TYPE AMOUNT WEIGHT
OIL GRAVITY (°API):@°F GAS/OIL RATIO (cu.ft. per bbl):	
GAS GRAVITY:	
	48
RECOVERED:	. ROM
300 FEET OF GAS CUT MUD	
SAMPLER: GAS CUT MUD AND VER	RY SLIGHT TRACE OF OIL
	<u></u>
REMARKS:	
REPORTED TIMES AND CALCULATED TIMES DO NOT AC	
DID NOT BEGIN AT THE REPORTED TIME. TOOL POS	SSIBLY WAS NOT COMPLETELY
CLOSED.	

	, 1994 <del>and 1</del>		Section 1			<b>86</b> 9
TVDE A O	de Messus	THE DEVICE			TICKET NO	71070200
IYPE & 5		ING DEVICE:	GAS	LIQUID	TICKET NO:	71970300
TIME	CHOKE SIZE	PRESSURE PS1	RATE MCF	RATE BPD	REMARKS	
12-3-84	120° care a diam's					
1930					ON LOCATION	
2000	7 1 1 1 1 1				PICKED-UP AND MADE-UP TOOLS	
2243	er san ta An		A department	·	TRIPPED IN HOLE WITH TOOLS	
12-4-84	1 m					
0422	1/8"BH	1 07.			OPENED TOOL - MODERATE BLOW -	
			路板可以		5" IN BUCKET.	
0427	1	2 07.			MODERATE BLOW INCREASING -	
,	P. Carlotte				6" IN BUCKET	
0432	- 14 - 14	4 OZ.			INCREASING BLOW - 8" IN BUCKET	
0437	11	5 OZ.		<del></del>	INCREASING BLOW - 10" IN BUCKET	
0442	11	5 OZ.			STEADY BLOW - 10" IN BUCKET	
0447	"	5 OZ.			STEADY BLOW 2 10" IN BUCKET	
0452	} <b>,,</b>	5 OZ.			CLOSED TOOL - STEADY BLOW -	
			i i		10" IN BUCKET.	
0552	· "	O OZ.	**; (3 98		OPENED TOOL - MODERATE BLOW -	
	· · · · · · · · · · · · · · · · · · ·				2" IN BUCKET.	4 1
0600		6 OZ.			INCREASING PRESSURE AT BOTTOM	
					OF BUCKET.	
0610	4 41	10 OZ.	#		INCREASING PSI	
0620	11	12.5 OZ.			INCREASING PSI	
0630	11	14 OZ.	7		"	
0640	п	15 OZ.			11	
0650	17	16 OZ.			11	
0700	11	17.5 OZ.			n	
0710		17.5 OZ.			STEADY PRESSURE	• .
0720	. "	18.5 OZ.			INCREASING PSI	<u> </u>
0730	"	19.5 OZ.	, , , , , , , , , , , , , , , , , , ,		INCREASING PSI	
0740	11	20 OZ.	\$		INCREASING PSI	1
0752	11	20.5 OZ.			CLOSED TOOL - NO GAS TO THE	<u> </u>
J. J.		25.0 02.		<del></del>	SURFACE.	
1256			4		OPENED BYPASS - JARRED OFF	
1570			45		BOTTOM.	÷
1200					TRIPPED OUT OF HOLE WITH TOOLS	t
1300			<u> </u>			
1800					OUT OF HOLE WITH TOOLS	
1900					JOB COMPLETED	<u>.</u>

10.00						
		Grand American	0.D.	I.D.	LENGTH	DEPTH
		And the second s				
		DRILL PIPE	4.500	3.826	5448.0	
		DRILL COLLARS	6.500	2.250	429.0	
1	D	PUMP OUT REVERSING SUB	6.000	3.000	1.0	5865.0
0	8	IMPACT REVERSING SUB	6,000	3.000	1.0	5866.0
		DRILL COLLARS	6.500	2.250	62.0	
		CROSSOVER	6.000	3.000	1.0	
3	Ď	DUAL CIP SAMPLER	5.030	0.870	7.0	
0	Ď	HYDROSPRING TESTER	5.000	0.750	5.0	5941.0
0		AP RUNNING CASE	5.000	2.250	5.0	5943.0
5		JAR	5.030	1.750	5.0	
6	v	VR SAFETY JOINT	5.000	1.000	3.0	
0		OPEN HOLE PACKER	7.750	1.530	6.0	5959.0
0		OPEN HOLE PACKER	7.750	1.530	6.0	5965.0
		CROSSOVER	6.000	3.000	1.0	
		DRILL COLLARS	6.500	2.250	62.0	· :
		CROSSOVER	6.000	3.000	1.0	3
0		FLUSH JOINT ANCHOR	5.750	3.000	45.0	
1 .	D	BLANKED-OFF RUNNING CASE	5.750		4.0	6077.0
				•		
	7	TOTAL DEPTH				6080.0
				* **		

# UNIT ) STATES SUBMIT IN DUPLICAT

GEOLOGICAL SURVEY

0	(See other structions reverse sid	oi e
0	structiona reverse sid	•

Form approved.
Budget Bureau No. 42-R355.5.
BE DESIGNATION AND SERIAL NO.

. TYPE OF WELL:	DI ETION	I OR	RECOMP	IFTION	REPORT.	ANE	LOGI	6. IF INDIAN, A	LLOTTER OR TRIBE NAME
			GAB WELL				LVE	7. UNIT AGREEM	ENT NAME
	Wi	ELL X	writ 🗀	DRT	Other	<del></del>			
b. TYPE OF COMPL  NEW [▽]	WORK [ DI	EP-	PLUG	DIFF.	OtherN	MAR :	18105	8. FARM OR LE	ASE NAMB
NEW X O	OVER E:	· L.	BACK L	nesva.	<del>- i</del>			Mustang	Unit
TEXAS EASTER	RN SKYLTI	NE OII	COMPANY			MARI	ION UT	OIL 9. WELL NO.	
ADDRESS OF OPERAT	TOR					O V C	& MININ	G 27-43.	
1775 Shermar	ı St Sı	ite I	1200, Deny	ver, Col	orado 802	<b>GA</b> S	d IV	10. FIELD AND	POOL, OR WILDCAT
LOCATION OF WELL	(Report loca	tion clear	rly and in accor	rdance with	any State requi	rement	e) <sup>à</sup>	Mustang	
At surface								11. BEC., T., R., OR AREA	M., OR BLOCK AND SURVEY
2098 FSL &			SE) Sec.	• 2/ <sub>1</sub> . IS	005, K23E		:	Sec. 27	. <b>4</b> 368.
	AWI Lebotten	JE10 W					1	R23E, S	
At total depth			· 						
Same			1	14. PERMIT		DATE !	ISSUED	12, COUNTY OR PARISH	7.1
1			API# 4	43-037-3		11-6	20-84	San Jua	
DATE SPUDDED	16. DATE T.D.	REACHE	1	MPL. (Read)	y to prod.)			REB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
11-21-84	12-6-8	_	1-4-8				- 5911 <b>'</b>	<u> </u>	5910'
TOTAL DEPTH, MD &	TVP 21. P	=	C T.D., MD & TVD		ULTIPLE COMPL	·- <b>,</b>	23. INTERV	D BY	CABLE TOOLS
6335		6293					<u> </u>	•   ÷X	25. WAS DIRECTIONAL
PRODUCING INTERV	AL(8), OF TH	S COMPL	ETION-TOP, BO	TTOM, NAME	(MD AND TVD)	<b>.</b>		3.任何是1	25. WAS DIRECTIONAL SURVEY MADE
Ismay 6	6050 <b>'</b>	6086							No -
								1.0	7. WAS WELL CORED
TYPE ELECTRIC AND			C - CNT	CD_DUC C	sonic C.	RI	> Cin.	era	Yes
GR - DIL -	- SFV	ok <b>≠</b> D	Marie Commission of the Party o	GR=BHC S	Maria and a superior of the su	and the last			
					Report all string	78 set in		TING RECORD	1 AMOUNT PULLED
CASING SIZE	WEIGHT, L		DEPTH SET (	/	HOLE SIZE	210	) sx red		None
16"	Tinhor	n 				_			
9 5/8"	36		2055	l l	121"	_	sx Pog		None None
5½"	15		6335		8 3/4"	330	) sx Cla	ss "H"	None
	<u> </u>		1			<u> </u>	30.	TUBING RECOR	RD
·			R RECORD		<u> </u>			DEPTH SET (MD)	
SIZE	TOP (MD)	вотт	OM (MD) SA	CKS CEMENT	SCREEN (1	MD)	2 3/8"	60.72	PACALE SET (MD)
		_					2.3/0		
, PERFORATION RECO	nn (Internal	1 200	l number)		1	1	TD CHOR E	RACTURE, CEMENT	SOUTE TO
					82.		<del></del>		
6050' - 6058			" holes		6050			1,500 gals.	28 HCl and
6062 - 6076	-		" holes " holes		.   3030	<del></del>	·	5,000 gals g	
6076 - 608	<b>5</b> 2	144	HOTES		<u> </u>	7.2			
								<u>でかまりま</u> まかかかま	
					RODUCTION				5
3.* ATE FIRST PRODUCTION	ON ! PR	ODUCTION	N METHOD (Flor			e and t	ype of pump	)   WELL S	TATUS (Producing or
1-4-85	1		ig - 2"x 1		d pump		•	produ	mi Cing
± = 0J	· •		CHOKE SIZE	PROD'N. FO			GAS 175	. WATER BBL.	GAS-OH-RATIO
	HOURS TEST			TEST PERIO		-	1 1/5	± - 35	2/93
		SURE 1	CALCULATED	OIL-BBL.	GAS-	-MCF.	<u> </u>	VATER-BBL.	OIL GRAVITY-API (CORE.)
3-8-85	CASING PRES		24-HOUR RATE	37.3		175		35 = = = =	44.4
3-8-85	CASING PRES	1.			1		. 1		
ATE OF TEST 3-8-85  LOW. TUBING PRESS.	50		vented, etc.)	<u> </u>				TEST WITNESS	ED BY
ATE OF TEST 3-8-85  LOW. TUBING PRESS 4. DISPOSITION OF GA	50 48 (Sold, used		vented, etc.)				` ĉ ;		rowson
ATE OF TEST 3-8-85  LOW. TUBING PRESS 44. DISPOSITION OF GA Flared	50 as (Sold, used		vented, etc.)				` ē ;		_
ATE OF TEST 3-8-85  LOW. TUBING PRESS 4. DISPOSITION OF GA Flared  5. LIST OF ATTACHM	50 AS (Sold, used	for fuel,	vented, etc.)  Report, C	Core Rep	ort	Loq	s Sent		rowson

# INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 88, below regarding separate reports for separate completions. If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments

should be listed on this form, see item 35.

4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State

Hem 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. Hems 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 24 and in item 24 abow the producing Hems 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 24 and in item 24 abow the producing interval interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval in item 33. Submit a separate report (page) on this form, adequately identified, intervals, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval for each additional interval to be separately produced, showing the additional data pertinent to such interval.

| New 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

| New 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

	- Ac	TRUE VERT. DEPTE					Ā					·	
38. GEOLOGIC MARKERS	TOF	MEAS. DEPTH	2668	2757	2940	4845	5953	6220	6286		*		
	# NVN		Shinarump	Moenkopi	Cutler	Hermosa	Ismay	Desert Creek	Akah	. ::	·		
THE THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING EN FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES			Core #1 Cut 60' recovered: 38'	Core #2 Cut 57' recovered: 50'	DST #1 30-60-120-300 BHT - 134°	2954 FFP:	IFP: 133-147 FSIP: 347 ISIP: 401 FHP: 2931						
SITY AND CONTEN	Description of the second	BOTTOM	6020	6027	.0809	. 44 - <del></del>	- -				-		-
IMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF;	DEPTH INTERVAL TENTED, CUCHICO COED, LINE LOCK CLES, LOCK		5960	6020	5965				•	2.7	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
SUMMARY OF POROUS ZONES:	DEPTH INTERVAL	FORMATION	Ismay	Ismay	Ismay		-		<u>.</u>				
37. SU		C	., ~ ( . ·			. ,	<b>i</b> .			:	*		<del></del>

Form 3160-5 (November 19 (Formerly 9-	4 2 1		UN'TED STA' ME, OF TH AU OF LAND MA	E INTERIO	*UBMIT IN TRIP' (Other instruction) R verse side)		Form approved, Budget Bureau No. Expires August 31, LEASE DESIGNATION AND	1985 SERIAL NO.
(I)o no	SUND of use this fo	RY NO	TICES AND RI	EPORTS O	N WELLS ch to a different reservoir. possis.)		. IF INDIAN, ALLOTTER OR	TRIBE NAME
OIL O	GAS WELL	OTHER					. UNIT AGREEMENT NAME Mustang	
2. NAME OF O	PERATOR	<del></del>				8	. FARM OR LEASE NAME	<del></del>
Texas E		Skyline	Oil Company			9	Mustang Unit . Wall No. 1,3,22-3	4,26-23,
1775 Sh	nerman S	treet, S	Suite 1200, D	enver, Col	orado 80203		26-33, 27-21, 27	
4. LOCATION O See also sp At surface	ace 17 below	ort location .)	clearly and in accord-	ance with any 8	tate requirements.*		Mustang Flat  11. SEC., T., E., M., OR BLE.	
						1 _	Sec. 22, 26 & 27	, T36S
14. PERMIT NO.	•		15. BLEVATIONS (S	bow whether DF,	RT, GR. etc.)	1	2. COURTY OR PARISH 13	Utah
16.		Charl A	propriete Box To	Indicate No	ature of Notice, Repor		_	
	ЖO	CHECK /		1	note of Fronce, Repor	-	T REPORT OF:	
					<b>-</b>			
PRACTURE	ER SHUT-OFF		PULL OR ALTER CASI: MULTIPLE COMPLETE	"	WATER SHUT-OFF FRACTURE TREATMEN	<u>,                                    </u>	ALTERING CASIN	
SHOOT OR			ABANDON*		SHOOTING OR ACIDIZ		ABANDONMENT*	
REPAIR WI	ELL		CHANGE PLANS	X	(Other)			
(Other)							multiple completion on on Beport and Log form.)	
proposed nent to t	work. If whis work.)	rell is direct	ionally drilled, give s	ubsurface location	details, and give pertinences and measured and true to modify the ap	e vertical o	depths for all markers an	
gatheri	ing and	injecti	on system as	follows:				
	1.			_	of 2" liquids li in same trench a			
	2.		l 9' x 40' (a 7-32 instead		orizontal storag o. 1.	e tank	at	
	3.	Delete	flare stack	at Well #:	1.			, ·
	·	201000				RE	CEIVED	<u>.</u>
					•	<b>A</b> PI	R 0 2 1985	1
					•		SION OF OIL S & MINING	* :
IR I hereby on	ertify that f	ie fateralije	is true and correct		(			*
BIGNED	Tuha	UDL,	melusa	TITLE Sta	ff Engineer		DATE 3-28-85	
(This space	e for Federa	or State of	fice use)					
APPROVE CONDITIO	D BY	ROVAL, IF	ANT:	TITLE			DATE	

\*See Instructions on Reverse Side

Form 3160-5 (November 1983) (Formerly 9-331)		UNITED STA MEN F TH AU OF LAND M	LE INTE	RIOR (Other Instructions verse side)	Form approved. Budget Bureau Expires August  5. LEASE DESIGNATION U-46818	31, 1985 AND SERIAL NO.
		TICES AND FOR A CONTROL OF THE CONTR		ON WELLS  pack to a different reservoir.	6. IF INDIAN, ALLOTTEE	OR TRIBE NAME
1. OIL (3) 040				ACCEIVED.	7. UNIT AGBEMENT NA	MB
WELL X WELL					Mustang	
2. NAME OF OPERATOR				NOV 0 4 1985	S. PARM OR LEASE HAM	_
TEXAS EASTE		OIL COMPANY			Mustang Unit	
			_	- JIVISION DE OU	9. WBLL NO.	
1775 Sherman	n Street, S	Suite 1200, D	enver, C	ology BUCAS OIL	27-43	
See also space 17 b	elow.)	cientif and in accord	TRUCK MICH BE	2) processed on exhibit de U.Q.	10. PIBLO AND POOL, OR	
	6001 777	(NTD OTT) OF T	27 m260	D22B	Mustang Flat	
2098. FSL &	909. LET (	(NE SE) Sec.	27, T36S	, R23E	Sec. 27, T36	s,
14. PERMIT NO.		15. BLEVATIONS (S	Show whether	DE RT CR etc.)	R23E, SLB &	
API #43-037	_2110 <i>4</i>	OGL - 5	_	, II. Ga, EGC.)		
	<del></del>				San Juan	Utah
16.	Check A	ppropriate Box T	o Indicate	Nature of Notice, Report, or	Other Data	
	NOTICE OF INTE				QUENT REPORT OF:	
TEST WATER SHUT	A	PULL OR ALTER CASI	<b></b> [			Г——
PRACTURE TREAT				WATER SHOT-OFF	BEPAIRING W	
SHOOT OR ACIDIZE		NULTIPLE COMPLETE ABANDON®		PRACTURE TREATMENT	ALTEBING CAS	
REPAIR WELL		CHANGE PLANE		SHOOTING OR ACIDIZING	ABANDON MENT	"
(Other) Paint	·			(Other) (Note: Report result	ts of multiple completion or pletion Beport and Log form	n Well
	g unit on t		_	s permission to delay l weather condidtions		
8. I hereby certify that SIGNED Multi- (This space for Fede	ulD(k	dusa	TITLE En	gineering Manager		·85
APPROVED BY			nimi t		<b>9</b> 0, 2	
			TITLE		DATE	

# \*See Instructions on Reverse Side

CONDITIONS OF APPROVAL, IF ANT:

ic: m. Anderson

Bureau of Land Management Branch of Fluid Minerals (U-922) 324 South State Street Salt Lake City, Utah 84111-2303

022404

February 6, 1987

Samedan Oil Corporation 1616 Glenarm Place Suite 2550 Denver, Colorado 80202

L. M. TURNER FEB . 9 1987

Land & Property Admin.

Re: Successor of Operator Mustang Unit

San Juan County, Utah

#### Gentlemen: .

We received an indenture dated February 1, 1987, whereby Texas Eastern Skyline Oil Company resigned as Operator and Samedan Oil Corporation was designated as Operator for the Mustang Unit Agreement, San Juan County, Utah.

This indenture was executed by all required parties. The signatory parties have complied with Section 6 of the unit agreement. The instrument is hereby accepted effective as of February 6, 1987. Please advise all interested parties of the change in unit operator.

Sincerely,

(Orig. Sgd.) H.A. Lemm

Howard A. Lemm Chief, Branch of Fluid Minerals

Enclosure

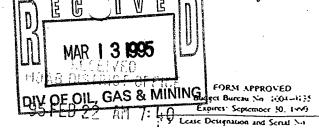
cc: Texas Eastern Skyline Oil Company

(Formerly 9-331) DEPARTA	UNITED STATES MEN OF THE INTERIOR U OF LAND MANAGEMENT	SUBMIT IN TRIPLICATES (Other instruction a reverse side)	Budget Bureau Expires August  5. LEASE DESIGNATION U-46818	31, 1985
SUNDRY NOTI	CES AND REPORTS ON als to drill or to deepen or plug back to TION FOR PERMIT—" for such proposed	WELLS o a different reservoir.	6. IF INDIAN, ALLOTTE	BWAN SSIET RO
OIL GAB OTHER			7. บพระ AGREEMEN ที่ผู้ Mustang	NO TI
Texas Eastern Skyline	e Oil Company		8. FARN OR LEASE NATE MUStang Unit	(2
3. ADDRESS OF OPERATOR	Suite 1200, Denver CO	80203	9. WELL NO. 27-43	
LOCATION OF WELL (Report location cl See also space 17 below.)     At surface	early and in accordance with any State	requirements.*	10. FIELD AND POOL, O	
2098' FSL ε 609' FEL (!	NE SE ) Sec. 27, T36S, I	R23E	11. SPC, T, B, M, OR I SURVEY OR AREA  Sec. 27, T36S  SLB &M	
14. PERMIT NO. API #43-037-31104	16. BLEVATIONS (Show whether DF, BT, G GL-5911	s, etc.)	12. COUNTY OF PARISH	18. STATE Utah
16. Check Ap	propriate Box To Indicate Nature	of Notice, Report, or O	ther Data	
NOTICE OF INTENT	TION TO:	SUBSEQUI	ENT REPORT OF:	
TEST WATER SHUT-OFF	CLL OR ALTER CASING	WATER SEUT-OFF	REPAIRING W	IELL
	ULTIPLE COMPLETE BANDON®	PRACTURE TREATMENT  BHOOTING OR ACIDIZING	ALTERING CA	[]
	HANGE PLANE	(Other) Notice of Sal	e	X
(Other)		(Note: Report results of Completion or Recomple	of multiple completion	on Well m.)
nent to this work.) *	e Oil Company on January	nd measured and true vertical	depths for all markers	and sones perti-
property to Samedan (	Oil Corporation. Effective	ve upon receipt by	the BLM of the	•
necessary paperwork,	Samedan will assume all	rights and obligati	ons as Operato	or.
Samedan's address is:				
	Samedan Oil Corpora 1616 Glenarm Place, Denver, Colorado	Suite 2550		
	Attn: Gary Br	une		
		FEB 23	1097 ABA	
•		OPPROCE OF COAS A		
8IGNED Michael D. Ander (This space for Federal or State office	Ma TITLE Ma	nager	<b>DATE</b> 2-2-	87
APPROVED BY	TITLE		DATE	
CONDITIONS OF APPEOVAL, IF AN			- 4/ 44 4 40	

POW

Form 3160-5 Treemner (May)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT



i<sub>PIOP</sub> U-46818 DEPARTMENT OF SUNDRY NOTICES AND REPORTS ON WEBUSEAU OF LAND MANAGEMENT Indian. Allorice of Tribe Name Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals 7. If Unit or CA. Agreement Designation SUBMIT IN TRIPLICATE 1. Type of Well UTU8910203950 X Well 1. Well Name and No. Mustang Unit #27-43 2. Name of Operator 9. API Wal No. Samedan Oil Corporation 43-037-31109 3. Address and Telephone No. (303) 534-1533 1050 17th Street Suite 1100 Denver CO 80265 10. Field and Pool, or Exploratory Area 4. Location of Well (Footage, Soc., T., R., M., or Survey Description) Mustang Flat, Ismay ~2098 11. County or Parish, State <del>1690'</del> FSL San Juan, UT NESE Sec 27-T36S-R23E CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 12. TYPE OF SUBMISSION TYPE OF ACTION XX Notice of Intent Change of Plans New Construction Recompletion Subsequent Report Non-Routine Fracturing Plugging Back Water Shut-Off Casing Repair Final Abandonment Notice Altering Casing Conversion to Injection Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operanous (Clearly state all pertanent details, and give pertanent dates, including estimated date of starting any proposed work. If well is directionally artilled, give subsurface locations and measured and true vertical depths for all markers and zones pertanent to this work, in

P & A procedure attached.

Samedan requests that P & A operations may begin as late as May 1, 1995 and that surface reclaimation may be completed as late as January 1, 1996.

•			
14. I hereby certary that the foregoing is true and co	orrect		
Signed Signal Stumuscott	Steinke Tuke Petroleum Engineer	Date _	2/20/95
(This space for Federal or State office was Approved by Allem	Associate District Manager	Date	3/1/95
Conditions of approval, if any:	CONDITIONS OF APPROVAL ATTACHES	5	
Tide 18 U.S.C. Section 1001, makes it a crime for	envinerant browneds and willfully as make as any discommon as a series of different		Calarina na fao. 11. an ann ann

Samedan Oil Corporation

Well No.: Mustang Unit #27-43

Surface: NESE Sec. 27 T. 36 S., R. 23 E.

Surface Lease: U-46818
API No.: 43-037-31104
CA No.: UTU-8910203950
San Juan County, Utah

#### CONDITIONS OF APPROVAL

- 1. Notify Jeff Brown, Bureau of Land Management, San Juan Resource Area Office in Monticello, Utah at (801)-587-2141 at least 48 hours before starting plugging procedures.
- 2. Each interval between plugs shall be filled with mud of sufficient density to exert hydrostatic pressure exceeding the greatest formation pressure encountered while drilling. In the absence of better information, a minimum of 9 ppg mud shall be used. The mud shall have adequate viscosity to stabilize the hole.
- 3. Within 30 days of completing these plugging procedures a Subsequent Report of Abandonment (SRA) shall be filed (Form 3160-5, Sundry Notices and Reports) detailing the work that was done and where plugs were placed. This documents the downhole plugging portion of abandonment.
- 4. A Final Abandonment Notice (FAN) shall be submitted (Form 3160-5, Sundry Notices and Reports) when the surface reclamation is completed and the surface is ready for inspection.
- 5. Any questions regarding the surface restoration may be directed to Jeff Brown of the San Juan Resource Area in Monticello, Utah at (801)-587-2141.

File: C:\GARY\PLUG\27-31.SAM 3/1/95

## Samedan Oil Corporation 1050 17th Street, Suite 1100 Denver, Colorado 80265 (303) 534-1533 Fac (303) 534-1103

## P & A PROGNOSIS

February 1, 1995

WELL NAME:

Mustang Unit #27-43

LOCATION:

NESE Sec 27-T36S-R23E San Juan County, UT

BLM LEASE:

U - 46818

CA:

UTU8910203950

**ELEVATION:** 

5911 GR

DEPTH:

6335 TD

6293 PBTD

CASING:

9-5/8" \* 36# \* J-55 at 2055' Cemented to surface

5-1/2" \* 15# \* K-55 at 6335' Cemented w/330 sx. TOC 4850'

PERFORATIONS:

6050 - 6058, 6062 - 6070, 6076 - 6086

TUBING:

200 joints 2-3/8" \* 4.7# \* J-55 \* EUE 8 rd

Cup Seating Nipple

Arrowset I Production Packer set @ 5877'

**RODS:** 

None

STATUS OF WELL:

SI due to high water production. Last produced

5 BOPD + 90 BWPD in June, 1991.

#### **Procedure**

- 1.) Inspect stock tanks. Fill one with 450 bbls fresh water. Prep location as needed for pulling unit.
- 2.) MIRU pulling unit and light plant. NU BOP. Attempt to release packer. If successful, TOOH, LD pkr. Proceed to step 4.
- 3.) If unsuccessful releasing pkr, MIRU wireline. Run freepoint log. Chemical cut or shoot tbg off at freepoint. RD wireline. MIRU cementers. Circulate well clean with water. Mix and pump 20 sx of class "C" cement. Displace with water to within 200' of end of tubing. RD cementers. Stand back 1925' of tubing. LD remainder. Proceed to step 5.
- 4.) If successful releasing pkr, TOOH, LD packer. PU cast iron cement retainer (CICR), TIH and set at 5975'. MIRU cementers. Sting out of CICR, circulate hole clean with fresh water. Sting into CICR. Establish injection rate. Mix and pump 20 sx of class "C" cement. Displace with 22.5 bbls of fresh water. Sting out, balance plug, stand back 1925', LD remainder.
  - Note 1: This will leave a plug with 26' cement above CICR, cement 111' below retainer to bottom perforation and 6.4 sx (8.4 ft3) of cement in formation.
  - Note 2: If injection into formation is not established, balance 200' plug above retainer, TOOH as in step 3.
  - Note 3: Maximum squeeze pressure is 3600 psi (75% casing burst).
  - Note 4: If CICR can't be set, TOOH, LD CICR, plug as in step 3 w/tbg at 5975'.
- 5.) RU wireline. RIH with casing gun. Shoot 4 squeeze holes at 2025'. RDMO wireline. PU CICR. TIH, set at 1925'. RU cementers. Establish injection rate. Mix and pump 40 sx class "C" cement. Displace with 5 bbls fresh water. Sting out, balance plug. TOOH, LD tbg.
  - Note 1: This will leave a plug with 100' cement above CICR, cement 100' below retainer, and 20 sx of cement (100' annular fill) between 5-1/2" casing and 9-5/8" casing.
  - Note 2: Open ball valve on 9-5/8" casing head to allow circulation to flare pit.
  - Note 3: Maximum squeeze pressure 3600 psi.

Mustang Unit #27-43 February 1, 1995 Page 3

- 6.) Dig out casing head. Cut off 9-5/8" and 5-1/2" casing heads. RU cementers. Run 50' of 1" pipe between 9-5/8" and 5-1/2" casing. Mix and pump cement until cement returns to surface. Run 50' of 1" into 5-1/2" casing. Mix and pump cement until cement returns to surface. RDMO cementers and pulling unit. Haul tubing and wellheads to yard.
- 7.) Weld plates on 5-1/2" and 9-5/8" casing stubs. Weld on 4" dry hole marker that will stand 6' above ground level. Bead the following on the marker:

Mustang Unit #27-43 NESE Sec 27-T36S-R23E San Juan County, UT BLM Lease NDM U-46818

8.) Remove production equipment, rip out flow lines. Rip, backfill and re-contour location. Re-seed as per BLM specifications no later than December 1, 1995.

Form 3160-5 Histometrians

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT



dget Bureau No :(O1-1735

	SUNDRY NOTICE	S AND REPORTS ON WELVES OIL G	U-46818
Do not	ase this form for proposals to t	drill or to deepen or reentry to a different OR PERMIT—" for such proposals	reservoir.
		T IN TRIPLICATE	7. If Unit or CA, Agreement Designation
1. Type of		T IN TRIFLICATE	
X Wa			UTU8910203950  8. Well Name and No.
2. Name of			Mustang Unit #27-43
	dan Oil Corporation		9. API Well No.
	and Telephone No. 17th Street Suite 1100	Denver CO 80265 (303) 534-1533	45.037-31104
4. Location	of Well (Footage, Sec., T., R., M., or Survey		The same of Exploratory Area
	FSL 637 FEL 1009'		Mustang Flat, Ismay II. County or Parish. State
NESE	Sec 27-T36S-R23E		San Juan, UT
	CUECK ADDRODUATE DOW		
12.	· · · · · · · · · · · · · · · · · · ·	(s) TO INDICATE NATURE OF NOTICE	E, REPORT, OR OTHER DATA
•	TYPE OF SUBMISSION	TYPE O	FACTION
	Notice of Intent	Abandonment	Change of Plans
	₩.	Recompletion	New Construction
	Subsequent Report	Plugging Back	Non-Routine Fracturing
	Final Abandonment Notice	Casing Repair Altering Casing	Water Shut-Off
100	er en	Other	Conversion to Injection
		Recognite	port results of multiple completion on Well Completion or tion Report and Log form.)
13. Describe &	Proposed or Completed Operations (Clearly state a subsurface locations and measured and true very	ill perunent details, and give pertinent dates, including estimated cal depths for all markers and zones pertinent to this work.1°	date of starting any proposed work. If well is directionally artilled.
4/2/95		wellhead, NU BOP. Release pkr	, TOOH tbg & pkr. PU CICK.
4/3/95	•	rton. Set cement plugs mixed wed to 36 viscosity between plug	
	Plug #	# Sx Interval	Comments
• .	1		CICR @ 5975. Perfs 6050-6086.
	2	40 1825–2025	CICR @ 1925. Perfs 2025.
	3	38 0- 50	1" down 5 1/2 and between 5 1/2 9 5/8
	All plugs witnessed by	Jeff Brown - BLM; Monticello,	
4/4/95		asing. Set dry hole marker.	
	•		
	•		
			No.
14. I hereby o	clury that the foregoing a true and correct		
Signod	AUN Scott Ste	inke Tide Petroleum Engineer	DateApril 11, 1995
(This spec	e for Federal or State office use)		
Approved	by	Tide	Date

APR 11'95 08:17 FR HAL'T IRTON-FARMINGTON 05 327 2534 TO 13P75341103

P.04

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